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ABSTRACT

This publication is one of two prepared for a South Asian colloquium on issues related to teacher training in Bangladesh, India, Pakistan, and Sri Lanka. This volume includes four papers presented at the conference. The papers present an analytical view of both policy and practical measures on teacher education. The first paper, "The Professional Development and Training of Teacher Educators" (Elwyn Thomas) examines recruitment, training, and career development in teacher education. The second paper, "Teacher Education: The Quest for Quality" (Motilal Sharma), looks at issues in teacher education in Asia, including World Bank involvement and regional cooperation. The third paper, "A Critique of Policy and Practice in India and Bangladesh" (Adarsh Khanna), analyzes preservice and inservice teacher education in India and Bangladesh, the chief strengths of the Indian and Bangladesh systems, and the importance of aid agency projects. The fourth paper, "Initial Teacher Training in Pakistan" (Haroona Jatoi), explores preservice and inservice teacher training in Pakistan. (Individual papers contains references.) (ND)

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Quality in Basic Education

Professional Development of Teachers

Policy and Practice in Initial Teacher Training

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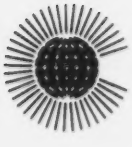
QUALITY IN BASIC EDUCATION

Professional Development of Teachers

Policy and Practice in Initial Teacher Training

Elwyn Thomas
Motilal Sharma
Adarsh Khanna
Haroona Jatoi



Commonwealth Secretariat

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PREAMBLE

Initial teacher training provides the focus for two volumes in the Commonwealth Secretariat's series of publications on the professional development of teachers.

Papers in the two volumes were prepared for a South Asian Colloquium held in Colombo, Sri Lanka in April 1992. The Colloquium provided a forum for discussion of issues related to teacher training in Bangladesh, India, Pakistan and Sri Lanka. Innovations and alternative strategies which aimed to improve quality in teacher education at the initial phase were debated among educationists from governmental and non-governmental organisations. The four country papers in the companion volume were prepared by the respective Ministries of Education and appear together with an overview essay. This volume takes a more analytical view of both policy and practical measures and is written by specialists working outside the teacher training systems of the four countries, but possessing deep knowledge of them.

The Education Programme of the Commonwealth Secretariat would like to thank all writers for their contributions to the two volumes.

CONTENTS

The professional development and training of teacher educators **1**

Elwyn Thomas

Introduction 1
- Politics, policy and the professional development of teacher educators 1
- Teacher education as a continuum 3
- The changing profile of the teacher educator 5
- A teacher educator model 8

Teacher educator recruitment 10
Teacher educator training 12
- Initial teacher training 12
- Induction and in-service training of primary school teachers 15

Further education and career development 17
Conclusion 18
References 19

Teacher education: The quest for quality **20**

Motilal Sharma

Introduction 20
Teacher as inputs manager 20
Changing scenario of education in Asia 21
Issues in teacher education 22
- The need for more trained teachers 22
- Teacher education curriculum 22
- Teacher participation in policy-making 22

Improving teacher education 23
- Suggestions at the government level 23
- Suggestions at the individual teacher level 24

The changing role of the teacher 25
World Bank involvement in teacher training 26
Regional co-operation to promote teacher education 27
Conclusion 28

A critique of policy and practice in India and Bangladesh **29**

Adarsh Khanna

INDIA **29**
Introduction: background 29

The New Education Policy 29
Current pre-service teacher education system 30
Elementary teacher training 31
Priority areas 32
District Institutes of Education and Training 33
Teacher educators 34
Re-organisation of teacher education 34
National Council off Teacher Education (NCTE) 34
Curriculum renewal 35
The chief strengths of the Indian system 35
Integration of pre-service and in-service training 35
Mutual support systems 36
The development of training materials 36
Correspondence courses 37
Teacher preparation as part of special projects 37
The impact of aid agency projects 43

BANGLADESH **45**
Introduction: background 45
Teacher education 45
Secondary 45
Primary 45
Priorities in Initial Teacher Training 46
In-service training 47
School-based in-service 48
Induction training programmes for the new curriculum 48
Bangladesh Rural Advancement Committees (BRAC) 49
The chief strengths of the Bangladesh system 51
The impact of aid agency projects 52
Main features of aid agency projects 52
Conclusions 53
Suggestions 53
References 56
Appendices 59

Initial teacher training in Pakistan **61**
Haroona Jatoi

Introduction: background 61
Research on teacher training 63
Teacher training in Pakistan 65
Pre-service training 65
In-service training 68
Conclusions 70
Project Basic Research in Developing Education Systems 70

THE PROFESSIONAL DEVELOPMENT AND TRAINING OF TEACHER EDUCATORS

ELWYN THOMAS

Introduction

It is the purpose of this paper to put forward ideas both practical and theoretical, for discussion (and, it is to be hoped, action) based on recent evidence from the country cases studies and current thinking on improving teacher quality through better training. The main thesis of the paper is, that while the quality of any educational system is determined by the quality of its teaching force, ultimately it is the quality of *how* that teaching force is trained and educated that really matters.

The names given to those responsible for training teachers include teacher educator, teacher trainer, co-operating teacher, teacher tutor, advisor and inspector. In this paper, I will use the term 'teacher educator' to cover all the above.

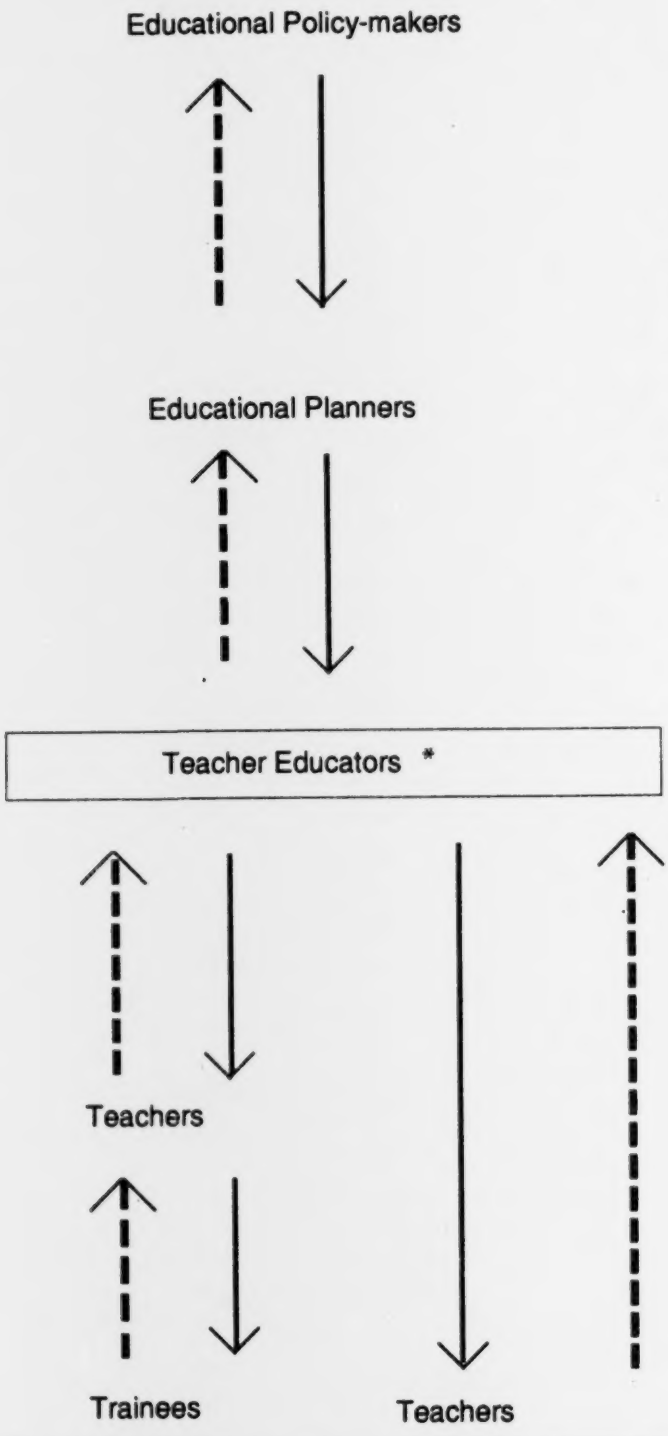
I wish to view teaching as a process of change, which involves both teacher and learner in an interactive and continuous context, which may have cognitive, social, moral and sometimes emotional outcomes. Teacher *education* is also a process of change, in which teachers in preparation and those in service, are exposed to ideas and practices with the ultimate aim of improving their professionalism and self-esteem.

While the main thrust of this paper will be towards the professional development and training of teacher educators for primary and basic education, some reference will be made to secondary education, for it is crucial not to see primary education as just an end in itself. This would have a limiting and stultifying effect on both the future planning of education in general, and the roles of teacher educators in particular.

Politics, policy and the professional development of teacher educators

In using the word 'change' in my views of teaching and teacher education, I include within it the term 'development' with the strong implications that development leads to improvement in the thinking behind, and the practice of education. However, not all developments are perceived by everyone as

Figure 1: The place of teacher education in the context of educational policy change



Key

* includes faculty-based staff, inspectors, advisors, experienced school-based staff

——— line of direction for policy change

– – – feedback line where it exists

improvements, even if they may have began life on this premise. Living as we do in a world of change and development, not least in education, where all levels from pre-school to university have experienced revision or reform in the curriculum, terms of service, finance, etc. it is difficult to stand aside from such flux.

Change and development as far as teachers and teacher educators are concerned, stem principally from political agendas which determine educational policy. Teacher educators are 'en route' in the change and development process as far as improving the quality of teachers and teaching is concerned (see Figure 1). Teacher educators in the past, have seldom been in a position to *affect* policy, but have a crucial role in *effecting* it. However, looking to the future, teacher educators may occupy a more pivotal role in not only effecting policy but influencing it as well. This may only come about, if and when the role and status of teacher educators takes on a higher profile, and this is to some extent the result of more and better opportunities for professional training and education of teacher educators.

Teacher education as a continuum

In discussing the professionalisation of teacher educators, in the context of change and development of an educational system, it is evident from current trends that initial training occupies only a small part of the total career development of the teacher. There are at least four phases to the process of teacher education, that any policy for professional improvement of teacher educators needs to take account of (see Figure 2). The duration of phases A and D are variable. Phases B and C have usually well defined time limits, depending on levels of education for which teachers are to be trained.

All four phases could be seen as a continuum. Phase A of the continuum refers to all 'would-be' recruits, who are likely to have some instructional experience, however variable and scant. This could include peer teaching, tutoring students, instructing in non-formal settings, teaching sport and leisure pursuits or teaching carried out by unqualified teachers. Such recruits already have a valuable repertoire of pedagogical 'entering behaviours', and should be able to build on them during their initial training.

Phase B can constitute anything from a few months to a four year training period, usually institutionally based with a variable period for practice teaching or Practicum. Increasingly, the trend is for more school-based training, involving less input from the training institutions.

Phase C, the period of induction, can take up to a year or more of the newly trained teacher's career. During this period, he or she is scrutinised by the school authorities and ministry inspectors as to their success as a practising teacher. This period is also known as the 'probationary period'. After a successful induction or probationary period, 'qualified teacher status' is usually conferred allowing the person to teach a particular subject or group of subjects, and for a particular age range.

Figure 2: The teacher education continuum

Phase A	Phase B	Phase C	Phase D
Pre-teaching Preparation Experience	Initial Teacher Training	Teacher Induction	In-service Training and Education

Phase D is an important phase, as professional support for the teacher during his or her career is crucial. This support should aim to improve a teacher's professionalism and consequently the overall quality of the teaching service. This phase is in fact at the heart of the concept of *Lifelong Teacher Education*, (Thomas, 1990), which could be seen to complement the *Concept of Lifelong Education*, (Dave, 1972). Figure 3 below shows how phases B to D might be viewed in the lifetime career of a teacher. The 'injection type' of lifelong teacher education includes regular but career spaced upgrading, extended over the professional lifetime of the teacher. This upgrading might be a specific course of study including a higher degree, a final degree for non-graduate teachers, or specific refresher courses to meet changes in the curriculum or administration of schools.

The 'on-going type' of lifelong teacher education is more akin to school based in-service professional development of teachers which could lead to some form of credentialism but not necessarily so. It might be part of a prescribed programme designed to meet the changing needs and demands of classroom practice and school organisation. It could be the basis of collaborative 'action type' research within the school, or between schools. In reality it is possible to envisage that the two types of lifelong education and training might be interlinked and dovetailed as part of policy decisions taken by government.

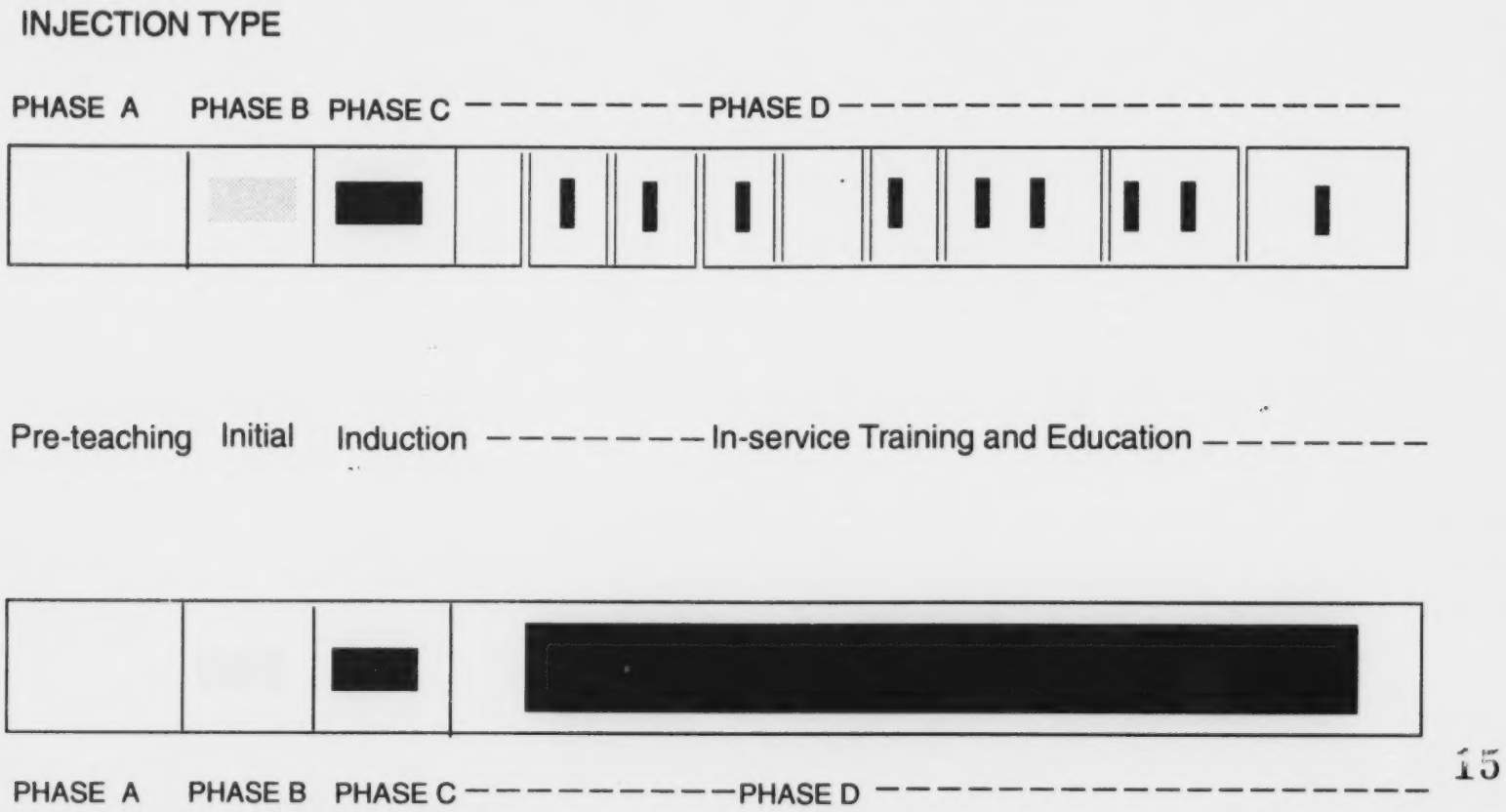
The teacher education continuum outlined previously envisages a different concept of the teacher educator, as one who previously just operated within the institutionalised initial training period. It provides a spectrum of a whole new set of job specifications relating to each phase. It has implications for factors such as recruitment, training and the longer term career development of teachers and teacher educators. Discussion of these factors will emerge in the course of this paper.

The changing profile of the teacher educator

Among the many issues to arise from the analysis of the four country case studies, was the role of the teacher educator and the unsatisfactory way most trainers or educators were equipped for the job. Before delving into questions of recruitment, training, and career development of teacher educators, we might pause a while and ask some pertinent questions. Who are the teacher educators? Why do we need them, and what should their functions be? What would constitute a teacher educator profile and how could teacher quality be promoted in the light of an established teacher educator profile ?

Firstly, taking the question of who are the teacher educators, we are reminded earlier in this paper that there are several categories of professionals who could claim to be teacher educators. Personnel who in one way or another train, monitor, or co-ordinate and who are put in charge of a programme of instruction in a school or college, could be considered as teacher educators. Previously, a teacher trainer was perceived to be a person who had served as a successful teacher in the educational system and was possibly a graduate, although graduate status has not always been a necessary condition for the job.

Figure 3: Teacher education continuum and two types of lifelong teacher education



Secondly, why are teacher educators needed? As the demands of educational systems became more complex and diverse, there was clearly a need for more sophisticated training for all types of teachers. These demands prompted the need for a longer term of institutional training, which in turn meant the need to employ a cadre of experienced personnel, namely the teacher trainer or teacher educator.

Thirdly, what should be the principal function of teacher educators? After the 1960s in the United Kingdom and other industrialised countries, there was a switch of emphasis away from the teacher trainer having a purely 'training role', to one which embraced the 'personal development' of the trainee. This was termed the 'educative role' of the trainer, who was not only concerned to ensure that the trainee had the necessary pedagogical skills of the classroom, but also a theoretical underpinning in education as a multi-disciplinary subject. This underpinning included educational philosophy, educational psychology, educational sociology, curriculum theory as well as an 'in-depth' study of subject disciplines, such as Science, Mathematics, Humanities. Therefore, it was necessary to have someone called a teacher trainer or teacher educator who could both train ***and*** educate future teachers. As the job of teaching was seen to be taking its place more prominently alongside medicine, the law and the other professions, the period of training was not only increased, but was rapidly becoming more intensive. This resulted in a policy in many countries of making teaching an 'all graduate' profession. Broadly speaking, the developments referred to above, have sometimes been mirrored by non-industrialised countries, particularly those which have been influenced by trends in Anglo-Saxon countries (the United Kingdom, Australia, the USA).

Finally, what would constitute a teacher educator profile, and what would be the place of this profile in promoting teacher quality? Changes in the conventional pattern of teacher education towards that of a continuum model may prompt the authorities to widen the concept of the teacher educator, from that of a professional operating principally in a training institution to that of a headteacher, co-operating teacher, mentor or school tutor. This extended concept could embrace the periods of induction and in-service phases of a teacher's career, development presently undertaken by inspectors and advisors.

However, with teacher education being seen as a more continuous process, the profile of trainers or educators is certain to change. The principal point I wish to make here is, that if teacher education is to be perceived as a more total and continuous career process, we may have to recognise the fact that the job description and responsibilities of the teacher educator will of necessity become wider, varied and more complex. Consequently there needs to be a policy for Teacher Educator Training and Professional Development.

As a result, we may have different profiles of a teacher educator, possibly dovetailing into various phases of the teacher education continuum.

A teacher educator model

As discussed previously in this paper, in industrialised countries in the 1960s, the change of name from teacher trainer to teacher educator was prompted by the fact that the job not only entailed training, but also educating the trainee teacher. The educative function was seen as an opportunity for trainees not only to study classroom skills and subject matter, but also to study 'in-depth' one or more subject disciplines, as well as issues concerning education and its relationship to the wider society. In this way, the personal development of the trainee teacher could be met.

In developing a teacher educator model for the education and training of primary school teachers in developing countries, it is important to recognise that the process of training and education are integral parts of an educator's job. However, the balance between the two are bound to be determined by priorities in education policy, and the economic constraints of a particular country. An issue not sufficiently addressed in either developed or developing countries is that teacher educators also need training and professional development. There is a serious need to recognise the fact, that as there are 'novice teachers' there are also 'novice teacher educators' and that training programmes for teacher educators are necessary. Training would include upgrading professional skills and knowledge, and the widening of working experience to include field experience in primary or secondary schools.

The model below (see Figure 4) shows three stages in the career of an aspiring teacher educator:

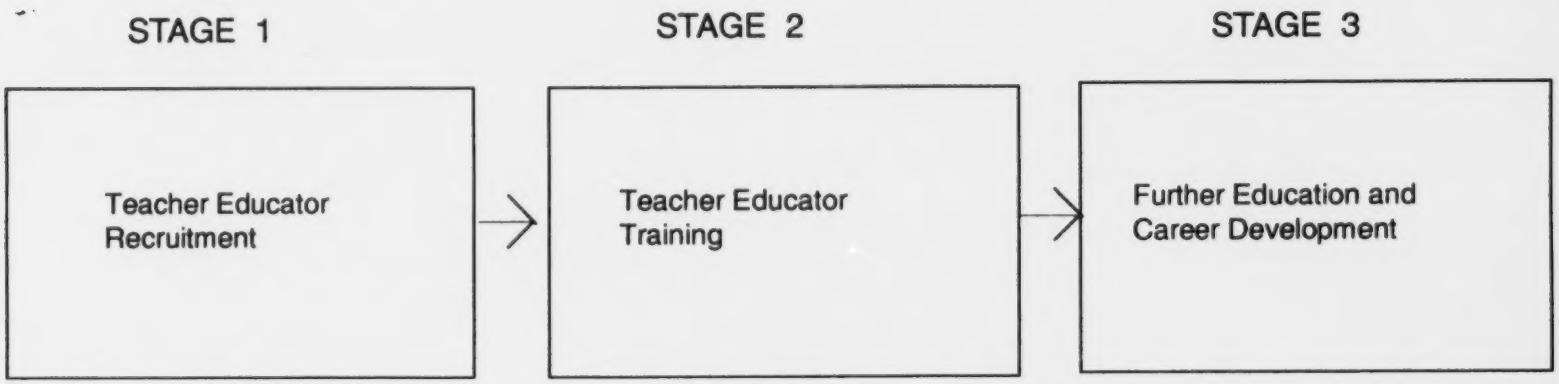
Stage 1 **Teacher educator recruitment** constitutes that part of the model which serves to scrutinise a candidate's suitability for the job. The recruitment stage needs to take account of a candidate's potential, as well as previous qualifications and experience. These features would ultimately play a part in drawing up a job description.

Stage 2 **Teacher educator training** would need to identify, and prioritise where necessary, the range of knowledge, skills and attitude needed for a professionally competent teacher educator.

Stage 3 **Further education and career development** refers to the longer term professional improvement of a teacher educator. This phase could include further study for a higher qualification, such as a masters or doctoral degree, attachments to institutions or attendance on courses and workshops. The essence of this phase would be one of upgrading and professional refreshment.

For the remainder of this paper I will attempt to discuss in depth some of the more pertinent details of the model.

Figure 4: A three stage model for teacher educator professionalisation



Teacher educator recruitment

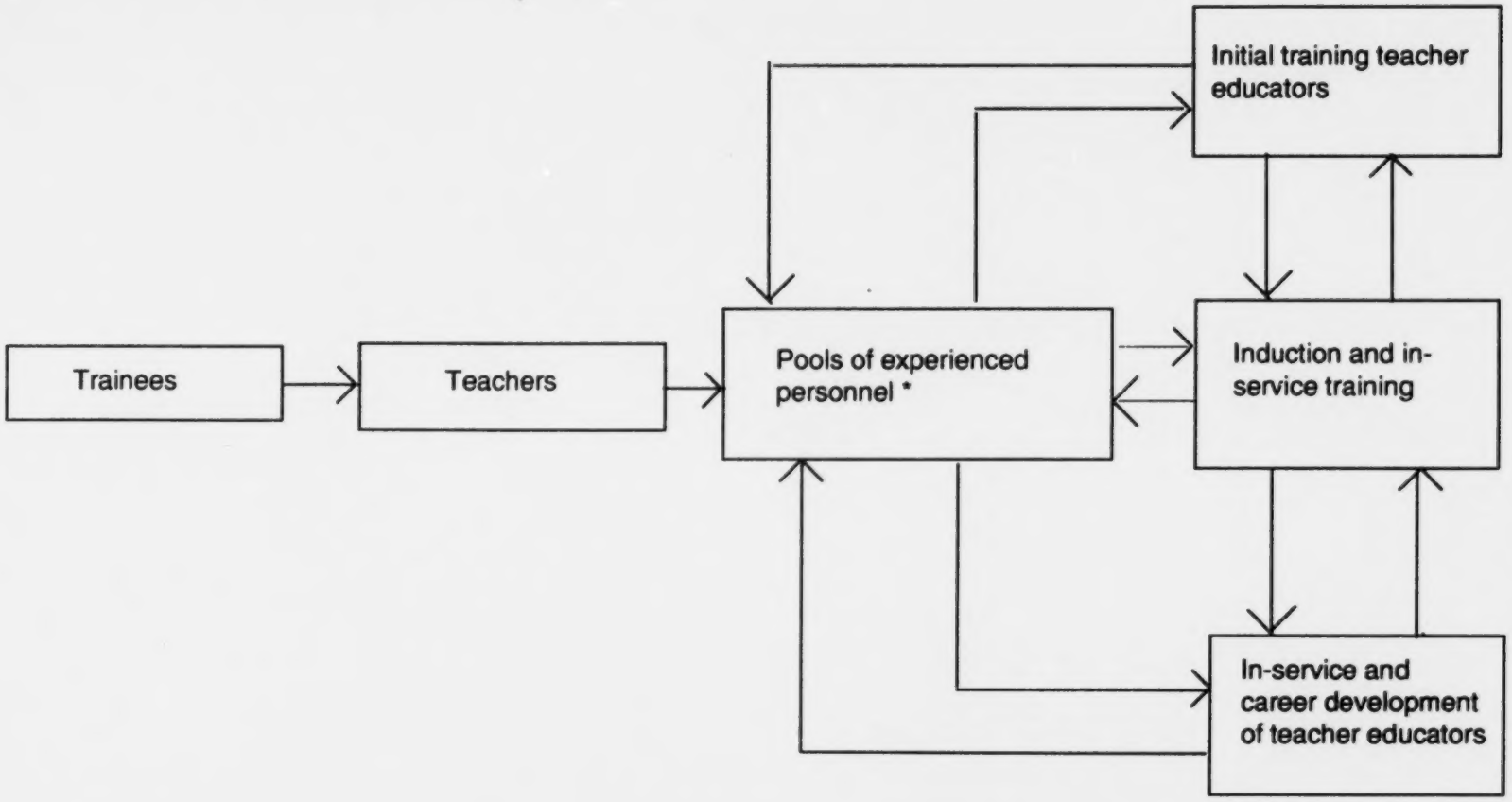
In the past, teacher educators or trainers have been recruited from a pool of serving teachers, or occasionally headteachers and school inspectors. In many developing countries, where academic qualifications are often more highly valued than relevant and successful experience in the field, graduates are recruited to fill posts as teacher educators who have little or no experience of teaching in primary or secondary schools. In drawing up a recruitment scheme, one needs to consider the nature and capacity of the potential pool of recruits.

As the training of teachers is increasingly seen as part of a continuous professional career, the role of the teacher educator is likely to change alongside it. The initial training phase of the teacher education continuum will require teacher educators with new and updated knowledge and skills. This cadre of teacher educators would include college based lecturers, senior experienced staff such as co-operating teachers, mentors and school tutors, and headteachers. For the induction phase, headteachers, their deputies, senior teachers and heads of departments are the likely personnel. This cadre of teacher educators would possibly be the ones to continue the training and education initiated in phase B of the continuum. For the in-service phase, inspectors, supervisors, university faculty members, as well as a cadre of senior school personnel could also fulfil the role of a teacher educator.

What this means is that the concept of the teacher educator has broadened extensively, and this breadth is intimately related to a teacher's professional development and career life span. If the continuum model of teacher education is to become the norm, it may be necessary to consider different pools of recruitment and to plan bearing in mind the consequences this may have for the training of teacher educators.

The recruitment pool is the starting point in the career pathways for teacher educators. These would include aspiring staff who are experienced personnel, such as senior teachers, headteachers, inspectors, faculty members (see Figure 5). In order to minimise the effects of pay differentials that may exist or arise between the career pathways, it would be necessary to lay down similar conditions of service and pay. This would ensure that the contributions made by each cadre of teacher educators to the different phases of the teacher education continuum are equally valued. It would be necessary to have the same basic salary scale for all career pathways with discretionary payments based on performance indicators. It is essential that all teacher educators in the teacher education continuum are valued equally, otherwise one phase will be perceived as being more important than another. An important part of the recruitment stage would be to draw up job specifications for teacher educators who wish to specialise in different phases of the continuum.

Figure 5: Teacher educator recruitment pools and career pathways



* These include: co-operating teachers, heads of department, headteachers, inspectors, faculty members, etc.

Teacher educator training

Although the continuum model of the teacher educator is a developmental process, from the teacher educator's standpoint this may not necessarily be the case. Each of the phases of the continuum should be seen as specialisations within teacher education. It could be envisaged that the consequence of training might be to provide a particular teacher educator with one or more specialisations. This would enrich experience and qualifications and should promote better teacher quality.

As this colloquium addresses specifically initial teacher training, most of what follows will be a broad sketch of the principal areas which could be included in programmes for teacher educators who might find themselves responsible for initial teacher training at primary level (and possibly at lower secondary level as well).

Initial teacher training

In most developing countries, the curriculum of initial teacher training, especially for primary and basic education, includes broadly the areas specified in Box 1. Apart from some theoretical aspects of the study of education, the emphasis is on training trainees to become competent in the knowledge and skills required in the classroom.

Box 1: Curriculum for initial teacher training - primary school level

1 Basic classroom subjects, e.g. Mathematics, Language, Science
2 Pedagogical Studies, e.g. teaching method, instruction, curriculum
3 Education including education theory, child development, psychology, sociology, philosophy
4 Practicum (or practice teaching)
5 Miscellaneous groups of subjects, including social studies, religion and moral values, culture and extra curricular activities e.g. sport, games, physical education

In some countries trainees who intend to proceed to lower secondary school may have the opportunity to select a main subject discipline, to be studied beyond classroom requirements, e.g. history, biology, etc. This would constitute the personal development part of the trainee's course as would much of the 'education' component.

A novice teacher educator has usually specialised in one or more of the above curriculum subjects and is likely to be competent by virtue of experience and qualification in several others. For example a Science teacher educator would be qualified in 1, 2 and some aspects of 3 in Box 1. If the teacher educator was a qualified teacher, he or she would have been also exposed to much of the remaining curriculum during his or her training.

Given that the curriculum for primary teacher education in many developing countries will broadly reflect the subject areas 1-5 in Box 1 above, and that the study of a main subject is unlikely to be included for the foreseeable future, we need to ask what training areas can be identified for novice teacher educators. It is likely that training would be principally 'on the job' or possibly in the form of an internship under the supervision of expert teacher educators (Arends *et al* , 1986, Brittingham, 1986). There would also be input from time to time through workshops, special courses and seminars. Training areas which could cut across most of the subjects in Box 1 are specified in Box 2 below.

Box 2 : Training areas for teacher educators (primary): initial teacher training

1. Content of teaching subjects
2. Pedagogical skills
3. Supervision and monitoring
4. Self-Evaluation and reflection
5. Assessment
6. Social skills and management styles
7. Basic research skills

Content of teaching subjects

Shulman (1990) has pointed out how important it is not only to have expertise in the processes of learning and teaching, but also in the place that content has in these processes. Each subject discipline whether it be language or a science, has unique content features which influence both learning and teaching. A teacher educator may be a highly qualified expert in his subject, but may not be aware of the impact the subject *content* has on his or her delivery to the learner and therefore to the learner's understanding of it. In other words, the teacher educator needs to analyse his subject content for both epistemological and pedagogical purposes.

Pedagogical skills

Included under this heading would be instructional theory and course design, planning, presentation and organisation of lesson material. Uses of learning and teaching resources, promoting conducive classroom climates, assessing learners and evaluation of teacher performance would also be included. Setting and following up targets would also be counted as pedagogical skills which would need to be developed. Teacher educators should be trained in the above skills as part of the subject expertise, and should be able to transfer these skills to other training areas and other contexts (e.g. distance education).

Supervision and monitoring

All teacher educators engage in supervising and monitoring trainee performance and progress. The Practicum, whether it be in the form of micro-teaching or macro-teaching, is the locus for this. Teacher educators

require special training in supervision, to develop empathy towards the trainee, to provide constructive feedback, to identify, observe and record salient teacher behaviours shown by the trainee. Teacher educators must be adept at pacing and monitoring of trainee progress and encouraging self-evaluation. The use of diaries and reports as 'check backs' to monitor whether targets are met is an essential task of a teacher educator. The research of Evans (1990) in Australia on the importance of setting and achieving targets by trainees provides a useful contribution to initial training.

Self-evaluation and reflection

Self-evaluation has already been mentioned above. The role of the teacher educator in promoting trainee self-evaluation which is appropriately recorded can provide valuable feedback for trainee and teacher educator alike, and acts as a focus for discussion between both parties.

Reflective thinking on the part of teachers and teacher educators about their teaching is a subject that has grown increasingly over the last decade, and has become a key theme in training programmes for teacher education in many countries. The work of Schon (1983, 1987) and Cruickshank (1987) has provided valuable insights and comments on this process. The role of teacher educators in the reflective process is clearly central, and a main focus of training would be to develop the art of 'sharing experience' with trainee teachers, in order that teacher educators really learn and understand what reflection means for them and their students. As Tabachnick and Zeichner (1991) point out, unless teacher educators realise the importance of understanding 'sharing' in the context of teacher reflection the essence and value of the process is lost.

Assessment

It is necessary that teacher educators constantly have the opportunity to up-date their knowledge and expertise in student assessment. Taking assessment to mean a measured judgement of behaviour, teacher educators should be exposed to the different assessment procedures that are available, e.g. competency based models, profiling, use of rating scales and other numerical categories, and should be prepared to develop their own measures.

As the influence of competency based teacher education grows, it is essential that teacher educators are aware of the pitfalls as well as the advantages of this approach. In programmes of teacher education, all types of assessment can be employed from continuous assessment of course and field work, rating scales for the practicum to conventional timed examinations. Assessment procedures employed by the distance education programmes, (as analysed in the paper 'Assessing learning', Thomas , 1991) have opened up a variety of procedures which the teacher educator could use.

Social skills and management styles

In recent years, as the teacher's social role has become more prominent, the demand to improve social skills has accordingly increased. Skills associated

with pastoral care, counselling and guidance, and listening to pupils and parents' problems now have a high profile.

Different styles of class management and the promotion of learner discipline have become more demanding and sophisticated over the years.

Most teacher educators have little recent knowledge and training in these skills, and there is an urgent need to develop programmes that would enable teacher educators to improve their knowledge and practice in areas such as decision making, use of different management styles, counselling and the development of leadership and headship qualities. While in some countries there will be a few teacher educators who are qualified in counselling and educational management (e.g. Malaysia, Singapore) most countries will not have this luxury. Therefore, what is being argued for here, is a level of general training for all teacher educators in these and other social skills.

Basic research skills

Many teacher education programmes in industrialised and non industrialised countries make some reference to the need for research training in teacher preparation. However, there are wide differences of opinion as to the likely objectives and content of a research training programme for teachers and teacher educators. The issue becomes even more critical in the context of developing countries, where both human and material resources are scarce. In many instances, the authorities may even question whether research should be a priority at all.

However, if we are to include training areas such as subject content, pedagogical skills, assessment and reflective practices, the need to find out more about these subjects requires researchers who are qualified to carry out the research effectively. Even in the most resource-sparse conditions, it is possible, given basic research training, for teachers and teacher educators to carry out essential fact finding and other data gathering activities. Research training does not need to be a costly or highly sophisticated process.

Teacher educator training in research skills should not only aim to introduce basic quantitative research procedures, but should also include substantial 'action type' research training, employing interpretive and other qualitative methods in collecting, observing, comparing and analysing data in schools and classrooms. Identification of the relevant research, problems in primary education and selection of the most appropriate research methods for use in solving the problems are skills which a teacher educator needs to have and be able to pass on to her trainees.

Induction and in-service training of primary school teachers

Box 3 below specifies the main training areas that could meet the needs for induction and in-service training of primary school teachers.

Box 3: Training areas for teacher educators (primary): induction and in-service training

Supervision and monitoring
Staff appraisal and assessment
Pedagogical skills
Social skills and management styles
Innovation strategies
Research methods

Clearly, the need for teacher educator training in supervision and monitoring would relate closely to the competencies necessary for trainees in initial training. Supervision and monitoring employed in the induction phase must be seen ultimately in either awarding qualified teacher status or not. This puts a particular responsibility on the teacher educator, to monitor the teacher's progress as accurately as possible. Training would involve identification of 'good' and 'bad' teaching performance, compiling accurate records and the ability to provide constructive feedback. It also means that a teacher educator faced with particular instances of 'bad' teaching would need to have sound training in prognostic, diagnostic and prescriptive techniques.

Updating and refresher courses on recent developments in pedagogical skills would also form part of the training requirements. In the area of social skills and management styles, teacher educators would require much more 'in-depth' training, as teachers in the induction phase often find difficulties in managing and controlling classes, making pedagogical decisions and developing assertive leadership roles. Many teacher educators working in teacher induction might have been experienced teachers or headteachers. These personnel would therefore have had substantial experience in supervision and monitoring. However, in appraisal, innovation and knowledge of research methods, which are relatively new subject areas in teacher education, they may be less qualified. Staff appraisal as opposed to staff assessment has strong elements of reflective practice. However, the setting of performance targets for professional purposes is also a key feature of appraisal.

Staff assessment is usually strictly linked to performance indicators with consequences for pay and promotion prospects. Training in the procedures of staff assessment is certainly an area of importance in any programme. Innovative approaches to classroom practice, and research into classroom problems, are areas where teacher educators need information and training opportunities. As it is likely that many of this cadre of teacher educators are either school based or ministry based personnel, 'on the job' training will be the norm. This means that they will, from time to time, need training at universities, colleges and teacher centres.

Further education and career development

One of the factors responsible for the poor quality of primary school teachers in developing countries is that when primary teachers prove themselves competent in their job they do not stay in it for long. They improve their status by getting further qualifications and moving to secondary schools and up the educational system. The less successful stay in the primary schools and may become headteachers or deputy headteachers. The poorly motivated drop out or become stuck in the system and perform badly. Rarely do we find in developing countries teacher educators who have primary school teaching experience. Most have taught in secondary schools. As the four country studies point out, this means that we have a serious gap in the field experience of teacher educators at primary school level. They are generally ineffective in the subjects and training areas included in Boxes 1 and 2 respectively. It is vital to attend to the education and career development stage of the model for primary school teachers.

At present, it seems that in all four countries there are at least three types of teacher educator. Firstly, one with graduate qualifications but little or no teaching experience in primary schools. These we may call **Teacher Educator Type A**. Secondly, there are primary school headteachers or their deputies who are probably carrying out most of the monitoring of their teachers' performance. These personnel have the field experience but often lack the status and qualifications. Therefore, the prospects for promotion and career development are limited. Let us call these **Teacher Educator Type B**. Finally, we have inspectors and advisors who are likely to have the academic qualifications, more field experience than Teacher Educator Type A, but lack 'hands on' experience in their earlier career in primary school classrooms. These we may call **Teacher Educator Type C**.

As far as Type A is concerned, the priority is for these personnel to have opportunities to actually teach in primary schools and receive training (as outlined in the training phase of the model), especially in subject matter analysis and pedagogical skills. Only if these teacher educators have shown competence in the training areas, should they be encouraged to upgrade their qualifications to master's level in their preferred subject. Type B needs training in some aspects of Box 2 and Box 3, principally supervision and monitoring, teaching subject analysis, and possibly appraisal and aspects of pedagogical studies. However, the main need here is to upgrade qualifications so that the subject area and knowledge of educational studies may be strengthened. If these measures were taken for only a small group, we would have the making of a cadre of not only 'master teachers', but 'master teacher educators'. For Type C, their training needs to include all areas in the training phase, and after proven professional competence, they could have their existing qualifications in education upgraded.

As can be seen, training is still likely to be a key component in this stage of the model. However, what distinguishes this style from the training stage is the possibility of improving the personal development of teacher educators through opportunities for higher academic study and higher profile pedagogical training.

Conclusion

For most of the present paper, the discussion has centred around the need to train and provide opportunities for the professional development of teacher educators. The thesis of this paper also mentioned that, it is to be hoped that both training and education will result in the production of better quality teachers.

The notion of quality in its application to teachers and teaching has received considerable attention over the years from all those who have a stake in the process of education. However, the quality of education is a difficult notion to define. Firstly, the concept of quality in education is notoriously contextual, i.e. what is good quality in one set of circumstances may not be in another. One always has to consider the starting conditions especially when discussing the idea of quality in different countries. Secondly, cultural, social and economic factors will have a decisive role to play in who determines what is 'good' quality or 'bad' quality education. Thirdly, I believe it is not that helpful to provide a neat statement of what quality might be, as contexts are not only different, they can also change, sometimes rapidly. Fourthly, the state of the art position concerning what constitutes quality in education, and of teaching in particular, is unclear.

Having advocated earlier in this paper that both training and education have a crucial role to play in the promotion of quality teaching, it is necessary to establish that whatever teacher quality is perceived to be in a particular context, and by a particular group of persons, and under what conditions, teachers and teacher educators should pursue change and development in the theory and practice of educational ideas. They should show a readiness to modify, or replace where necessary, existing ideas and practices. Pursuance of change and development and the *readiness to adapt* to new conditions are perhaps the strongest features of a successful teaching career. Teacher educators who have had the opportunities of training and career development, especially within the changing context of teacher education, are more likely to be prepared for the challenges of change. It may be, that in meeting these challenges, the promotion of quality in education will be initiated and at the same time will add to a better understanding of what the quality of education really means ?

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TEACHER EDUCATION: THE QUEST FOR QUALITY

MOTILAL SHARMA

Introduction

Nothing happens in education unless it happens in the classroom. Of what use are sophisticated planning systems in central headquarters or policy pronouncements or ambitious five-year plans, if, in the end, they are not articulated in the classroom? It is in the classroom that education really takes place. Yet if you visit several classrooms you will note clearly how classrooms differ from each other in their 'feel'. In one classroom, you may find students engaged in learning activities, interacting with each other and with the teacher and instructional materials. The atmosphere is full of enthusiasm: the teacher and the students are zestful and exude confidence in what they are doing. The environment is so stimulating that every moment is highly satisfying for the teacher and students. In the second classroom, the teacher may be speaking and the students simply listening. No interaction is taking place. There is only one-way communication. The brooding discontent of the students is palpable. The teacher is perhaps hiding his lack of a sense of direction behind a cloaked authority. In the third classroom, one may find confusion. The classroom is marked by neither joy nor despair, but by hollow ritual. These are different learning environments in the world of the classroom: where learning either takes place or not.

Teacher as inputs manager

A classroom is not simply the four walls of a concrete structure. Such a structure could be a bedroom, or a prison, or a castle, or could be used for meditation. It is not the physical structure which defines the classroom. A classroom is a place or situation wherein learning and teaching take place. For example, the church can be considered a classroom when there is a mass, since the priest is giving a planned message. Even in the family a discussion on a specific issue can come close to a classroom situation: at the end of the session, everyone is relatively more experienced than before.

The classroom is a receptacle for education inputs, such as the students, the teacher, the curriculum, and curricular materials. But it is the teacher who plays the pivotal role. If the teacher is not competent or qualified, or does not have positive attitudes towards the students or the teaching profession, or does not have the appropriate skills to handle the curriculum in terms of instruction methodologies, all these inputs could be wasted. An appropriately trained and qualified teacher is a precondition for the optimum use of all the inputs provided in the classroom, including the learner's time. In brief one can indeed say that nothing happens in the classroom unless it first happens with the teacher.

Changing scenario of education in Asia

In recent times, there have been several movements sweeping through the education systems of Asian countries. These include the move towards universalisation of primary education, continuing education, education for the world of work, the restructuring of primary and secondary education, the emphasis on communication technology, science and technical education, and - to my mind the most critical quality input - increasing attention on teacher training and distance education.

To be specific, the reforms in pre-service and in-service teacher education now range across laterally and upward and downward vertically. At the top, changes in policy-formulation and curriculum development now involve more participation by teachers and are not just left to the curriculum experts. Technical panels on teacher education have been organised to enable the teaching profession to keep abreast of state of the art information technology so as not to lag behind other professions. At the same time, the concern for quality renewal has been met by the establishment of so-called apex teacher institutes or even teaching universities. These high level institutions draw the best faculty and have strong exchanges with international teacher training centres. More and more efforts are going into research and development. Likewise, curricula reforms in teacher education are constantly taking place, in terms of extending the duration of programmes and upgrading curricula content to make the subjects and topics not only school-oriented but also community-directed.

The most visible changes are in the use of open learning systems in the training of new teachers, especially of female teachers in remote rural areas, and in the retraining of teachers already in service. Open learning systems allow the maximum exposure of teachers to educational and communication technologies, and offer various options to meet different needs and to cope with the constraints and limitations of conventional training systems. These systems take the form of distance education and non-formal education. A mix of these systems has also been introduced in the form of 'training outposts' in remote areas where a nucleus force of teachers, fully equipped with instructional materials and tri-media facilities, encamp themselves for a week or two using mobile training vans or even animal conveyances. In this way, the best available experts are brought to

rural areas. These are sometimes supplemented by mass media programmes on radio and television.

Issues in teacher education

The need for more trained teachers

The problems of illiteracy are directly related to the lack of trained, qualified teachers, especially in the rural areas. Throughout Asia Unesco (1988) has estimated that the total teaching staff numbered 22.1 million, consisting of 12.1 million in the first level, 8.5 million in the second level and 1.4 million in the third level. It is apparent that this teaching force is grossly inadequate for the huge problems confronting the region today. This is exacerbated by the disturbing fact that an estimated 25 to 35 per cent of these teachers are either unqualified or inadequately trained or have received no training at all. Unesco has estimated that as of 1990, the total number of adult illiterates throughout the world is 963 million people with an average illiteracy rate of 27 per cent. Of this total, the developing countries have 921 million or 97 per cent of the total, of which the Asian region alone accounts for over 65 per cent.

It must be emphasised however, that the issue of quantity is not simply a matter of numbers. What is more relevant is the student/teacher ratio, i.e. the number of children actually being taught by a teacher. How often have we seen the phenomenon of surplus teachers being unemployed in the huge cities, while there is vast inadequacy in the countryside? It is the ratio that counts, and thus the deployment or distribution of teachers throughout the country is a critical issue.

The most serious shortfall in the supply of qualified teachers will be in the rural areas, particularly among female teachers. This problem requires the introduction of innovative methods of pre-service training to mobilise more entrants into the profession particularly from the rural areas. The same applies to recurrent in-service training of teachers in the profession. Both pre-service and in-service training requirements will have to be met by alternative and supplementary systems such as the adoption of open learning techniques including distance education and non-formal education.

Teacher education curriculum

A key issue is the relevance and comprehensiveness of the teacher education curriculum. The duration and content of courses, and the methodologies of instruction have no uniform formula or approach. Neither is there a common understanding of what specific methods or techniques of training, use of curricular materials and study guides and aids, will prove most useful to teacher-students and faculty. There is an obvious need for more sharing of these concerns, experiences and expertise, among Asian countries.

Teacher participation in policy-making

There are similar problems in establishing appropriate mechanisms for involving teachers in the design and formulation of policy. They must feel a

sense of ownership at the initial stage of ideas and concepts if they are to translate this participation into active involvement in curricula implementation. How often have we seen education policies and plans falter due to weak execution? It is the teachers that determine how effective implementation of policy is likely to be.

The argument may be put forward that budgetary constraints are the reason for these problems. This is only partly true. What is urgently needed is a revitalisation of what is already there, of what is already in place, and the most important component in place is the teacher. But give him or her the right tools. Do not send teachers out poorly motivated, poorly equipped and poorly supported.

Underlying these issues of quantity and quality in teacher education is the need for better-managed teacher training institutions and more effective policy-formulation and macro-planning among education authorities. Most training institutions tend to be conservative and limited in their methods and approaches. In an area which should be marked by high innovation, creativity and flexibility, their facilities and equipment are outmoded. Their faculties are quite unfamiliar with the use of modern education and communication technologies. In sum, the teaching profession appears to have been left behind by other professions such as medicine, engineering, management, computer science, etc. A major reason is the inadequate political and funding support for teacher education programmes in these countries.

Improving teacher education

Suggestions at the government level

1 Governments should start by developing clear-cut policies for prioritising budgetary resources and incentives for teacher education and teacher welfare along the lines of self-reliant development. They should bear in mind that teachers represent the largest labour force in all developing countries. The option for a separate teacher-education cadre should be seriously considered.

2 The development of national teacher education authorities or councils to help the government in the formulation and monitoring of suitable policies, research services and teacher welfare activities is suggested. Such bodies can help to encourage the involvement of the private sector and NGOs. An alternative is to establish technical panels or committees on teacher education to ensure that the teaching profession is kept abreast with developments in the field.

3 Various strategies need to be developed to make teacher training a continuous rather than a one-shot approach. The teacher training curricula in most developing countries were developed sometimes 20 years ago - and are continuing exactly along the same vein. There is no empirical basis for justifying a one or two year duration for a teacher training programme. This issue should be examined so that there can be a more efficient and effective mix of service and training.

4 The use of open learning systems to supplement conventional training systems is to be encouraged. These offer a multi-mode approach which allows for the production of more teachers, and for the strengthening of different programmes and delivery systems. For example, conventional training is constrained by its high costs, its need for physical infrastructures and full-time trainers and student-teachers. These inadequacies can be supplemented by distance education and non-formal education techniques. Similarly, the impersonality of distance education can be lessened by features of the conventional system, for example by providing practical training in actual school settings and institutional summer schools.

5 Community participation and the use of community resources in the classroom to support teachers is also important. Community leaders can be invited to present real life situations in the classroom to support the teacher. Community support also needs to be encouraged in the organisation of teacher activities including teacher resource centres, school conferences and teachers' seminars, all of which help to enhance the image and status of the teaching profession in the community.

Suggestions at the individual teacher level

1 The selection of future teachers should take the following into consideration:

(a) A positive, constructive, optimistic, enthusiastic and caring attitude is an important consideration in the selection of the future teacher. Candidates for the teaching profession cannot be considered like a mechanic, who will be applying his or her skills to non-living tools and parts. The teacher is dealing with people - young boys and girls.
(b) The measurement of teaching aptitude must form part of the selection criteria. The candidate must have the ability to impart subject knowledge and skills in the demanding job of nurturing young minds, forming young people's values and developing their skills.
(c) The entire education process deals with the development of the mind, of the intellect. It is imperative therefore that the candidate-teacher has a consistent scholastic performance, since teaching effectiveness is conventionally measured by student achievements such as grades and examination results.

2 The teacher must develop a positive image of him or herself in service to society. Teacher training requires a complex array of characteristics matching that of other professionals, but this is often neglected due to the public image that teaching is just another employment activity. Teachers must be infused with a high image of their profession and of themselves. Therefore, teacher training should develop this perception of the teaching profession.

3 Teachers must also be capable of utilising all kinds of instructional materials, especially those that are available to them immediately. In rural schools there are many everyday materials in the world of nature, world of work and world of neighbours that can be brought to the

classroom by an imaginative and well-trained teacher. It is these materials that are probably more effective in the countryside than modern gadgets.

4 Teacher training should prepare students for real classroom situations. Experts talk among themselves while preparing curricula for teacher training, with only the occasional involvement of teachers who are facing the students in the real world of the classroom. Experts think of the curriculum as an exclusive job only for themselves.

5 Efforts to involve teachers, parents, industry, employers from the world of work, community leaders, in the design of teacher training programmes have been weak and dismal. How to involve them effectively is a big question. The teacher has to be trained to exploit these community resources, as well as the institutions surrounding the school.

In the past, the participation of communities in the schooling process was very pronounced. Today, that tradition seems to have withered away. It is necessary to bring this practice back - and the best place to start is during the training of the teacher. This community component is vital to the sustenance of a school, and the teacher must play a vital role in encouraging community participation. Adult education could be introduced as part of teacher training curricula.

The teacher's personality needs to be developed through training so that he or she has the confidence to approach people or institutions outside the formal education system. He or she must feel comfortable in interacting with people from various sectors and levels. The development of such communication skills and overall personality can only be accomplished if training is rigorous and relevant and prepares the teacher for changing circumstances.

6 Teachers also need to be equipped with proper skills for the evaluation and assessment of student performance. We know that many non-school factors such as poverty, literacy level of parents, and the influence of the community, have an impact on the child's performance. It is therefore important that teachers develop skills for identifying the potential problems which children face and for solving the problems on-the-spot rather than after an extended time when help is no longer useful.

7 All of this means that the teachers must be trained for efficient management of the learning process in general and classroom teaching in particular. It is not a mechanical matter of blackboard work and lectures. Rather, it requires a working knowledge of the psychology of the child and an ability to establish appropriate learning environments to awaken the child's interest in the learning objectives and the world of studies.

The changing role of the teacher

The scenario of today's school has changed: the teacher's role is no longer limited to the four walls of the classroom. He is expected to work with the community, parents and specialists. He has to prepare instructional materials

which he cannot handle by himself. He needs the support of technical and audio visual experts. Yet the training of teachers remains unchanged.

Today's classroom seems to be shifting away from the philosophy of education, the community and the world. The teachers need to bring back the philosophy of education into the classroom so that proper values and attitudes on the part of students are developed. But the teachers of today are unable to do this because they are simply not trained to do so.

The management of resources is critical but is never taught to teachers. They should know the concept of resource management so as to optimise the use of school facilities. The school can be used for community activities as well as by other institutions in the neighbourhood. School buildings are used only for a few hours a day and a limited number of days a year. Capital investments in buildings and equipment are not optimised. They can be maximised only if trainers, teachers, supervisors and school principals are trained in such activities.

The teacher must be trained to be an effective leader, community organiser, manager of facilities and facilitator of learning. In the community, there is the hospital, police station, post office, bank, church or temple or mosque and other community groups. The teacher should be able to exploit all these institutions and to mobilise such resources.

The preparation of the teacher as a professional cannot be achieved without considering her welfare. For how is she to accomplish these requirements without the proper incentives and motivation? There has been much rhetoric about teacher welfare, but the rhetoric has not been matched by actual performance. What are these concerns?

The first concern is the compensation of teachers. They remain at the bottom rank of professionals in our society today. Very often, this draws the least able members of a family to the teaching profession, while the most talented are shifted by their parents to medicine or engineering or management courses.

The second is that, at the moment, teachers are considered as mere employees, as people in ordinary employment. Teaching has lost its status as a profession. Restoring the profession's status can be encouraged by the setting up of teacher centres where teachers can obtain journals, reference materials and facilities. Such arrangements can enrich the self-education of teachers and enhance their socialisation process. There could also be teacher exchange programmes, where teachers can enter into socialisation activities. This should be a prime objective not only of teachers themselves but of education policy making bodies and authorities.

World Bank involvement in teacher training

The Bank has been involved in the education sector since 1972 and has significantly helped DMCs in the development of various subsectors of education, including primary, secondary, higher secondary, technical-vocational and tertiary education. In all of these projects, teacher training and staff development has been one of the core components. But this component has always been restricted to project-specific objectives and demands.

In the light of these experiences and its increasing involvement in education in general, and in school education in particular, the Bank started to consider viable alternative approaches. These included the use of non-formal education and distance education as well as investigating how multi-modal approaches could maximise the capacity of existing systems, and promote the quality, quantity and cost-effectiveness of teacher training.

In view of the increased investment by various donors in school education and the shortage of trained qualified teachers, the Bank has now begun to support independent teacher training programmes in DMCs. The first project was prepared in 1991 for Primary Education in Nepal. Now the Bank is preparing another project for teacher education in Pakistan covering all levels and using the multi-modal approach including open learning systems. There is an emphasis on the use of education and communication technologies. Also curriculum content and conventional training systems are strengthened through the training of master trainers, the development of instructional materials, the introduction of new training methodologies, improved library facilities, research activities and fellowship programmes to facilitate the sharing of experiences and methodologies among member countries.

Regional co-operation to promote teacher education

Teacher education as a support system is already well-established in the Asian and Pacific region. However, the existing conventional teacher education institutes are hard-pressed to meet the growing demands for trained teachers and for consistent quality in the provision of training programmes. Conventional methods are also not able to provide training opportunities in rural areas especially to disadvantaged groups, including women.

With increased investment in school education from various sources, including multi-lateral, bilateral and national, the upgrading of teacher education systems needs special attention. A large number of innovations have been tried out to address the central issues of quantity and quality. Extensive experience has been generated, but not necessarily shared between countries. There is therefore an obvious need for the sharing of resources and capabilities in the field of teacher education on a regional basis. Combining various successfully tested initiatives could lead to improved quality, increased quantity and greater cost-effectiveness. Moreover, an expanded use of telecommunications, including satellite technology in several countries, could help improve efficiency and effectiveness and stimulate a multi-mode approach to teacher education. If carefully planned and applied at the regional level, this multi-mode strategy could offer improved access to quality teacher education for disadvantaged groups, including rural people and women.

Regional co-operation could help in providing consistent quality in teacher education in a cost-effective way across a wide range of subject areas and methodologies. A regional training resource could be developed and maintained which would enhance the prospects of collaboration without prejudice to the cultural aspirations of individual countries, and

efforts could be co-ordinated to avoid overlaps in courseware development. Along with the training of trainers, it could also include curriculum design, as well as instructional materials design, development and production. Such a regional co-operation mechanism, if established, could also disseminate information, distribute resource materials, conduct training programmes to meet country-specific needs and help in the co-ordination of research activities on teacher education.

Conclusion

The current situation is alarming, to say the least. The sheer number of new teachers needed over the next decade cannot be met by existing programmes and delivery systems. The situation is complicated by the fact that up to 25 to 35 per cent of existing teachers are under qualified and untrained. A new strategy is needed that provides the appropriate mix of programmes for elementary, secondary and tertiary education with the compatible delivery systems of formal, non-formal and distance education, as well as the use of education and communication technologies and mass media.

Reviewing the state of education in the developing world today, it is proper to conclude that quality teacher educating and training is essential for the education of the rural and underprivileged communities of Asia. Indeed, in the whole spectrum of education, it is clear that quality teacher training today is essential for a better education system tomorrow.

A Critique of Policy and Practice in India and Bangladesh

ADARSH KHANNA

India

Introduction: background

India is a federal republic having twenty-five States and seven Union Territories (UTs). Prior to 1976 education was the responsibility of the individual States. In that year a constitutional amendment made education the joint responsibility of the States and Central Government. However, the primary responsibility for education continues to be with the States.

The New Education Policy

The NEP of 1986 visualised the evolution of a national system of education. The salient features of the national system were to include:

- provision of equal opportunities to all, not only in terms of access to educational facilities, but also in the conditions of success
- a common 10+2+3 structure of education
- a national curricular framework, containing a common core along with other more flexible components
- the introduction of minimum levels of learning for each stage of education
- a technical support system for continuous improvement of the quality of education.

A Framework for National Curriculum for Elementary and Secondary Education was developed by the National Council for Educational Research and Training (NCERT), New Delhi (1988) with the involvement of a large number of educationists, curriculum experts, teachers, teacher educators, members of parliament, journalists and representatives of teacher-organisations.

A broadly uniform structure, i.e. 10+2+3 is followed in all parts of the country. The schooling period for the 6-14 age group is divided into pre-

primary education, the elementary stage covering four or five years of primary education and then three years of middle/upper primary (4/5+3); the secondary or high school stage covers two years (Classes IX and X); and the higher/senior secondary stage covers a further two years (Classes XI and XII). The NEP visualises a move towards an elementary system comprising five years of primary education and three years of upper primary.

The provision of free and compulsory education to all children until they complete the age of 14 is a constitutional directive. Between 1950-51 and 1984-85 the number of primary schools increased from approximately 210,000 to approximately 520,000 and the number of upper primary schools from 30,600 to 130,000. At present the number of primary schools (Classes I-V) may be around 7 lakh. Even so, some areas are still without primary schools and nearly one-third of the schools in rural areas have only one teacher. The emphasis, in the past, has been on the enrolment of children - approximately 95 per cent of boys in 6-11 age-group and 50 per cent in 11-14 age-group are enrolled in schools. The corresponding figures for girls are 77 per cent and 36 per cent respectively. However, 60 per cent of the children drop out between classes I-V and 75 per cent between I-VIII.

The NEP emphasised universal enrolment and universal retention of all children. It proposes that all children by the time they attain the age of about 11 years will have had five years of schooling or its equivalent through the non-formal stream and likewise that free and compulsory education up to 14 years of age will be provided to all children by 1995.

The measures proposed by the NEP for improving the quality of elementary education included laying down the 'minimum levels of learning'; reforming the content and process of education; introducing a more child-centred approach; improving school buildings and other facilities; providing additional teachers and a comprehensive programme of teacher education.

Current pre-service teacher education system

There were 27.86 lakh elementary teachers in the country as on 30 September 1986 (*Fifth All India Educational Survey - Selected Statistics*, NCERT, 1989). It is estimated that the number of teachers at the elementary level on 30 September 1992 should be around 35.2 lakh (MHRD, 1989).

At present about 90 per cent of the teachers are trained. In some of the states, particularly the north-eastern ones, there are untrained teachers. In some of the states there are unemployed trained teachers. The medium of instruction at the elementary stage is the regional language. Hence the mobility of trained and qualified teachers from their own state to another with a different language is limited. For other socio-economic reasons as well each state prefers to employ its own residents.

The duration of pre-service teacher education for the elementary stage varies from one to two years in different states. Its entry qualification is 10 years of school education in some states, 11 in others and 12 years in yet other states. The different patterns are 10+2, 11+1, 11+2, 12+1 and 12+2.

In some states teachers with the 10+2 pattern of training are considered qualified to teach Classes I-V. In some states teachers with the 12+2 pattern of training are considered qualified to teach only up to Class V. In many states teachers trained under the 12+2 pattern are eligible to teach up to Class VIII.

Nine types of pre-service teacher education programmes are organised in the country (see Appendix 1).

Elementary teacher training

At the elementary level there are about 1200 Elementary Teacher Training Institutes (ETEIs). About 65 per cent of the ETEIs are run by the Government and the remaining 35 per cent are managed privately. There is wide variation in the physical facilities, educational equipment and the quality and strength of staff available in these institutes. Well over two hundred ETEIs run general teacher training programmes and one or more of the six different types of special training programmes, i.e. language teacher training programme, physical education certificate, Art, Craft and Drawing Certificate and Diploma in Agriculture for special teachers. The State Departments of Education exercise administrative control over ETEIs in their respective states.

Though there is a fairly wide network of ETEIs all over the country, there has been a growing realisation that the teacher training programmes offered by them do not adequately meet the needs of Universal Elementary Education (UEE). The major areas of concern and dissatisfaction have been as follows:

1 The initial teacher training is not relevant and responsive to the actual conditions in which teachers work. For example, in many schools there are just one or two teachers for four or five classes. The initial training does not equip them with the skills necessary to ensure minimum levels of learning in such classrooms.
2 Each state has an official state (regional) language which is the medium of instruction in elementary schools. Within many states there are tribal belts and pockets of other language groups whose dialect/spoken language is different from the regional language. In these cases, the teachers are not adequately prepared to provide a smooth transition from the child's mother tongue to the regional language.
3 The courses for pre-service teacher training are abstract. They do not equip the teachers with the practical skills they need. In the past, attempts to change the training programmes were generally limited to up-dating the theory courses. Little was done to change the practice.
4 The Government of India has adopted the policy of introducing an elementary education stage of eight years. The training programmes of the ETEIs are generally addressed to primary classes (I-V). There is no specific, relevant training for teachers who teach Classes VI, VII and VIII in the elementary schools.
5 There are about 8000 primary teacher educators working as teaching staff in the primary teacher training institutes. They have generally been trained in the secondary teacher training colleges and have little if any

experience of primary education. Consequently, the primary teacher education programmes have become pale shadows of secondary teacher education programmes and do not have much relevance for implementing the programme of universal elementary education in the country. Therefore, to prepare teacher educators for ETEIs, teacher education courses specifically geared to meet the needs of elementary education are required.

6 Many of the ETEIs are not adequately equipped with sufficient personnel, physical facilities, audio/video aids/computers, libraries, etc. to be able to do justice to their responsibility for effectively preparing teachers.

7 Teacher education programmes consist mainly of pre-service teacher training, with practically no systematic programmes of in-service training, facilities for which are lacking in most of the ETEIs. It is felt that these institutes should follow up their initial training through a well planned programme of continuous in-service education.

8 In order that teacher education institutions do not become mechanical and outdated in their approach and methods, they should be able to engage in programmes of action research and other research related to elementary education. A professional relationship between these institutions and elementary schools is necessary.

9 In the context of 'Education for All' all children with minor disabilities, for example mental retardation, impairment of hearing or speech, must be provided with a minimum of Basic Education through the elementary schools in the classrooms with the normal group of children. All teachers require some special training/orientation for handling these children. Most of the existing ETEIs are not equipped to discharge this function.

10 The administration of ETEIs in India is controlled by the State Departments of Education. However, to make these institutions progressive and forward looking, it is felt that they should enjoy greater autonomy.

Concerns like these have led to the setting up of many commissions/committees to review and suggest ways and means for overhauling the system of elementary teacher training in the country. NEP and Programme of Action (POA) have also suggested a major restructuring of teacher education.

Priority areas

According to NEP the professional training of elementary teachers is a prerequisite in all parts of the country. The requirement is only waived in areas or among groups where there is a severe shortage of teachers.

Keeping in mind the central place of teacher education NEP calls for its overhaul as the first step towards educational reorganisation, giving particular importance to the training of elementary school teachers. The functions of an elementary teacher education institution should include:

- pre-service and in-service education of teachers for the formal school system
- induction level and continuing education of Non-formal and Adult Education instructors and supervisors
- training and orientation of heads of institutions in institutional planning and management and micro-level planning
- orientation of community leaders, functionaries of voluntary organisations and others influencing school level education
- academic support to school complexes and District Boards of Education (DBEs)
- action research and experimentation work
- evaluation for primary and upper primary schools as well as Non-formal and Adult Education programmes
- provision of a resource and learning centre for teachers and instructors
- consultancy and advice, for example to DBEs.

District Institutes of Education and Training

It is envisaged that selected ETEIs should be developed as District Institutes of Education and Training (DIETs), both for pre-service and in-service courses of elementary teachers and for the continued education of personnel working in Non-formal and Adult Education programmes.

The DIETs are to perform all the functions mentioned above. The Head of a DIET should have the status of a Principal of a Degree College/B Ed College and most of the faculty members are to be persons with a background in elementary education. Special selection procedures are to be be established to ensure that the ablest persons are selected, given higher scales of pay and are reoriented in co-operation with NCERT, NIEPA, SCERTs, University Departments of Education, some outstanding teachers, etc. The NFE/Adult Education District Resource Units should be an integral part of DIETs and additional faculty would be provided for this. Central Government should meet a major share in funding this programme.

Facilities for using technology such as computer-based learning, VCR, TV, etc. will be provided at DIETs. The teachers receiving training at DIETs will be encouraged to develop their own instructional resources using the facilities available at DIETs. It should also be possible to make copies of video cassettes, audio-cassettes, etc. in these institutes. The imaginative use of traditional teaching aids is also to be emphasised and teachers encouraged to improvise their own instructional materials.

As DIETs get established, substandard ETEIs are to be phased out.

The process of establishing DIETs has already started: 287 DIETs have been sanctioned by the Ministry of Human Resources and 140 DIETs have actually been established. There are 462 districts in the country but it is visualised that about 400 DIETs will actually be established. Some of the smaller districts will be grouped together with one DIET serving more than one district. Each DIET is expected to serve at least 2500 teachers. It will take some time before the network of DIETs can start functioning effectively in the whole country.

Some difficulties have been experienced with regard to the location of DIETs and the recruitment of capable staff with experience of elementary

education. The concept of DIET is however likely to yield good results if it is implemented in the proper spirit.

Teacher educators

It is being increasingly realised that the effectiveness of teaching training institutions depends largely on the quality of teacher educators. There is a wide gap between the training needs of elementary school teachers and those who are authorised to train them. It is now proposed to create a special cadre of Teacher Educators who will be appointed as staff in SCERTs, secondary teacher education institutions and DIETs. Persons selected to this cadre will receive incentives such as housing and placement in a higher pay scale. Special arrangements will be made for the continuing education of these persons. An interchange will also be organised between teaching and teacher education: a sufficient number of supernumerary/reserve positions will be created in schools to enable people from this cadre to be classroom teachers for one or two years every four or five years.

Re-organisation of teacher education

In recent years there has been a major initiative to strengthen the quality of elementary teacher training both pre- and in-service through the networking of institutions at different levels. A centrally sponsored scheme of restructuring teacher education was taken up in 1987-88 with the following objectives:

(a) the training of 500,000 school teachers every year till 1990 to meet the objectives envisaged in the NEP;
(b) the establishment of 400 DIETs;
(c) the strengthening of 250 Colleges of Teacher Education and the development of 50 of them as Institutes of Advanced Study in Education;
(d) the strengthening of State Councils of Educational Research and Training (SCERTs);
(e) the establishment and strengthening of Departments of Education in Universities.

All these institutions were to devote special attention to the problems of implementing universal elementary education while improving quality. These institutions are trying to strengthen elementary teacher education in a variety of ways, including research, the development of training materials, the training of teacher educators and participating in special projects to evolve and demonstrate effective ways of bringing about change.

National Council of Teacher Education (NCTE)

This body has been in existence since 1973 but it has not been able to guide the system of teacher education to meet the new challenges due to some inherent constitutional difficulties. To remedy this the POA on NEP gives

the Council an autonomous and statutory status. It is to perform the following functions:

(a) accreditation/disaccreditation of institutions of teacher education;
(b) laying down of standards and norms for institutions of teacher education;
(c) development of guidelines for curricula and methods of teacher education;
(d) others like earning credits for in-service education, duration of various courses, emphasis to be laid in training programmes for NFE/AE instructors, place of correspondence education in teacher education, etc.

Some other functions like the preparation of learning materials, orientation of senior teacher educators, etc. will continue to be performed by NCERT and SCERTs in co-operation with NCTE.

Curriculum renewal

The revision of the teacher education curriculum has been a major area of concern in recent years. Soon after the publication of the NEP and *A Framework for National Curriculum for Elementary and Secondary Education* (1988), NCERT initiated the exercise of teacher education curriculum renewal through a long process involving a cross section of teachers, teacher educators, university faculty members and eminent educationists. *A National Curriculum for Teacher Education: A Framework* is now available. It provides broad guidelines for bringing about changes in the content and process of pre-service and in-service teacher education programmes through action by concerned agencies like the State Departments of Education and the universities.

The chief strengths of the Indian system

In recent years some effective policies and programmes have been initiated in India for training teachers in basic education. These could be shared with other countries in the region. Some strengths of the system are as follows:

Integration of pre-service and in-service training

The concept of initial (pre-service) teacher training integrally linked to a continuing programme of in-service education and the institutional arrangements for its implementation through DIETs is a particular strength of the Indian system.

The pre-service teacher education programme is considered an induction or initiation process. It is not aimed at turning out a finished teacher. Teacher education is recognised as a continuous process beginning with pre-service preparation and continuing throughout the teacher's career. The content and processes of teacher training are to be geared to the demands of achieving the goal of basic education for all. The teacher education programmes are intended initially to equip the teachers with the necessary basic knowledge, skills and attitudes and then to continue to assist

them as they endeavour to realise the goals of Basic Education through formal and non-formal approaches/institutions. The establishment of DIETs in every district with their four main functions, i.e. pre-service education, in-service education, resource support and research, is a very important move. How DIETs adapt their training programmes to the needs of their respective districts and organise research and database; how training programmes are geared to the demands of the national system of Basic Education; how DIETs relate to other existing ETEIs and provide a leadership role, etc. would be of interest to other countries in this region. A few DIETs which have already started functioning effectively could be selected for intensive study.

Mutual support systems

These support systems have evolved through the networking of a large number of institutions at national, state, district and sub-district levels.

India has been able to evolve a quite successful mutual support system for strengthening teacher education programmes qualitatively as well as quantitatively.

At the national level, institutions like MHRD, the NCTE, NCERT, CIET, UGC, Central Universities and NIEPA are helping to:

- lay down appropriate policies
- evolve programmes of action
- conduct research
- develop a National Curriculum Framework as well as guidelines for revising curriculum syllabi
- develop training materials
- organise the training of teacher educators and key resource persons
- monitor and guide innovative projects
- establish norms for the Teacher Training Institutes and provide accreditation.

At the state level, State Departments of Education, SCERTs, State Universities, Colleges of Education and other specialised institutions conduct research, revise the curriculum and syllabi, develop training materials, train teacher educators, and guide and monitor the working of the DIETs, etc.

At the District level, DIETs and ETEIs take care of the needs of their respective districts/catchment areas.

Over the years procedures for mutual collaboration and support have emerged. The participatory approach has more or less become a norm where a programme needs the involvement of more than one agency. The countries in the region could benefit from studying this system.

The development of training materials

These have been developed both for pre-service and in-service programmes. The materials are in the form of textbooks, teacher guides, teaching aids, source books, educational films, video programmes,

educational journals, etc. A good deal of material is also available in English thus enabling these materials to be shared more widely.

Correspondence courses

These courses are for initial training as well as for in-service education. This experience could also be shared.

Teacher preparation as part of special projects

A number of special projects have been initiated in India which involve various forms of teacher training.

Programme of Mass Orientation of School Teachers (PMOST).

One of the objectives of this programme was to increase teacher motivation and to get the teachers involved in the implementation of the National Education Policy. The NCERT was designated as the agency for designing and implementing this programme at the national level, and it has been doing so through the SCERTs. The orientation of 500,000 school teachers was to be undertaken every year. The programme was run during 1986-90 and about 17.6 lakh teachers were trained. The multi-media training packages developed by the NCERT and the way other state/district/local level agencies were involved in such a massive operation over a short period of time would be of interest to other countries currently adopting new policies of universal primary education and qualitative improvement.

Course in pre-school and early primary teacher education

NCERT helped the Delhi Administration in developing a two-year integrated curriculum for nursery teacher training courses in an attempt to bring pre-school and primary education closer to each other. This course is intended to develop the skills of handling children from three to eight years, i.e. pre-school and the first two years of primary school, thus emphasising play and activity approaches for the early primary levels.

Education of the disabled

In the section on equal education opportunity the NEP emphasised the need for expanding the educational facilities for disabled children. The POA lays down the principle which states that no disabled child who can be educated in a general school should be placed in a segregated special school, and even those who are so placed initially should be transferred to general schools as soon as they acquire the communication, self-help and basic academic skills. The teacher education department of the NCERT has taken up a special project with some financial input from UNICEF, Delhi, and has developed teacher-training courses for three levels of training. The Rehabilitation Council of India has developed courses at the fourth level. UGC has supported special education units at many universities. Some of the institutions are offering B Ed(Special Education) and M Ed(Special Education). Although teacher education to meet the educational demands of children with special needs arising out of disability is a recent

phenomenon in India, a good beginning has been made, and the experience can be shared with other countries of the region.

Minimum Levels of Learning project

Minimum Levels of Learning (MLL) have been identified for classes I-V. MLL are applicable to the formal and non-formal programmes preparing children up to standard V. The MLL are now being tried out in the states through projects located in government/voluntary institutions and some university departments. Pools of competency-based test items have been developed in different subjects to assess the present achievement level of the children in the schools selected for the project. Competency-based teaching-learning strategies are being evolved by the project teams through a process in which classroom teachers also participate. Much of the training is on-the-job training through participation in the development of the competency-based materials and test items. A brief induction training is also organised.

Since most of the countries in this region are engaged in evolving MLL, sharing this experience would be advantageous.

The Bihar Education Project (BEP)

Bihar is one of India's largest and most populous states. Almost all educational indicators in Bihar are well below the national average. BEP represents one of the most ambitious educational development efforts undertaken in India.

The specific goals of the project are as follows:

1 The universalisation of primary education, as a composite programme of access to primary education for all children up to 14 years of age; universal participation till they complete the primary stage through formal or non-formal education programmes; and universal achievement of not less than the minimum levels of learning.
2 A drastic reduction in illiteracy, particularly in the 15-35 age group, bringing the literacy level in this age group to at least 80 per cent, ensuring that the levels of the 3-Rs are functionally relevant.
3 The modification of the educational system to ensure equality for women and their empowerment.
4 The provision of equal educational opportunities for adults and children belonging to the 'lower castes', ethnic communities, and the poorest strata of society.
5 Improving people's abilities to cope with problems related to livelihood, environment, and mother and child health by relating education to their working and living conditions.
6 Laying special emphasis in all educational activities on science and environment and the inculcation of a sense of social equity.

Training

The critical role of training in BEP is derived from an awareness that:

1 Educational reconstruction will be brought about in the existing social milieu and through the work of the existing teachers and instructors of AE/NFE.
2 Practically everyone can be made to realise their capabilities, as well as developing skills and competences for the better performance of their role.
3 It is possible to infuse into the present system some catalytic persons who, although belonging to the same milieu, can introduce a new and positive dynamism.

Training under BEP therefore sets out:

- to orientate all persons involved as to the goals and strategies of BEP
- to upgrade their skills and competences to enable them to discharge their responsibilities
- to motivate them to function as active participants in the planning and implementation of the project.

Some of the important categories, and their approximate numbers (per district on an average) are given in Table 1.

Table 1: Categories of personnel involved in BEP

Teachers in service	5000
Shiksha Karmi	300
Adult education instructors	1200
Non-formal education instructors	1000
Supervisor/Prerak in AE/NFE	200
Shiksha Sathin & Sahayogini	200 + 20
Village-level committee members	2000

In addition, training of new candidates for the job of teachers is also provided.

A range of institutional and non-institutional arrangements for training are to be strengthened and new ones established. These are to include:

(a) District Institutes of Education and Training (DIETs): to act as resource centres at the district level;
(b) DIET Sub-Centres: established at the sub-division level for providing in-service training to teachers and instructors (AE/NFE) and to serve as resource and reference centres for them;
(c) District Resource Units: distinct entities under BEP, set up to relate mainly to adult education and non-formal education, training of village level animators, activists and Mahila Samakhya;
(d) various non-institutional resource groups, individual resource persons, creative individuals and school complexes.

The project started in 1990-91 with three districts of Bihar. It is expected to cover all the twenty districts in four years through a phased expansion programme.

The Shiksha Karmi Project, Rajasthan

This is a six year project aimed at revitalising and expanding elementary education in about 2000 remote and socio-economically backward villages in the State of Rajasthan. The project attempts to solve the problems of:

- poor enrolment, particularly of girls
- high dropout rate
- teachers' absenteeism
- poor local relevance of the curriculum.

The crucial innovation in the project is the substitution of the primary school teacher by a team of two educational workers, 'Shiksha Karmis'. Unlike the school teacher in the project villages, the Shiksha Karmi is a local person, living in the village.

Shiksha Karmi candidates should have had about eight years of primary schooling. They are selected by a special committee on the basis of individual aptitude and the villagers' preferences. After one month of training the two Shiksha Karmis in a particular village are supposed to take over the school and teach an average of 45-50 children for two to three hours per day. In order to reach children unable to attend day school the two Shiksha Karmis are to open 'night centres' at places convenient to the learners. At the night centres another group of 45-50 children will be taught for about two hours per evening according to a specially devised curriculum for classes I-V.

The role of the Shiksha Karmi in the village may be described as follows:

1 S/he is a voluntary educational worker residing and working in a remote village.
2 S/he is expected to articulate and respond to local needs and aspirations as part of her/his educational efforts in order to make them more relevant.
3 S/he is expected to actively encourage regular attendance as well as retention of all children until they have completed the equivalent of five years of elementary education.
4 S/he is expected, with the support of the community and co-operating outside agencies, to organise and run elementary education through day schools and/or night NFE night centres.
5 S/he differs from a regular teacher in the formal system of primary education in the sense that s/he is an insider in the village and is involved in a continuous process of recurrent training and support in order to upgrade her/his education qualifications.
6 S/he is also visualised as a village level social worker/activist; participating in various programmes of social development.

Special efforts are to be make to recruit female Shiksha Karmis. About 20 Training Centres for Women will be established in order to provide supplementary primary education to female Shiksha Karmi trainees.

Innovations are envisaged in the curriculum and instructional methods to make the learning process child-centred and related to the environment, and to improve the pace and quality of learning.

A prerequisite for the Shiksha Karmi system is that the voluntary educational worker receives continual support and encouragement. An intensive system of monitoring, participatory evaluation, refresher courses and upgrading training is built into the project.

The project is designed to expand gradually to cover the physical targets (140 blocks, 2100 villages, 5000 Shiksha Karmis).

Andhra Pradesh Primary Education Project (APPEP)

Andhra Pradesh is a southern state of India with an area of 275,068 sq. kms. It is divided into 23 districts and each has further been subdivided into Mandals for the purpose of general administration. According to the 1991 census (provisional) the state has a population of 66.3 million of which 32.7 million are females. The literacy rate is 45.11 per cent; which is rather low compared to the All India literacy rate of 52.11 per cent. The percentage of literacy among women is only 33.7 per cent. The Government of Andhra Pradesh (GAP) is trying to achieve the goal of Universal Elementary Education (UEE) which envisages the provision of free and compulsory education to all children up to the age of 14.

APPEP was formally agreed between the Government of UK, Government of India and Government of Andhra Pradesh in September 1989 initially for a period of five years (1989-1994), but it is likely to be extended for a further two years.

Goal and strategy

The overall goal of APPEP is to bring about a substantive qualitative improvement in teacher competencies, classroom practice and learning outcomes and to contribute to the attainment of UEE.

The following strategy has been adopted:

1 To make learning in primary classes activity-based through:
- a comprehensive human resource development programme for teachers, teacher educators and education administrators
- the provision of activity-based learning materials to schools
- the better design and construction of school buildings.

2 To provide professional support to teachers on a continuous basis through:
- a network of teachers' centres
- building add-on facilities to teachers' centres
- providing necessary materials at teachers' centres
- training Mandal Education Officers to act as facilitators
- providing printed materials to teachers on professional subjects

Coverage and targets
The project will cover the entire state of Andhra Pradesh in a phased manner.

Pedagogical principles
There are six pedagogical principles through which the project seeks to transact the curriculum at the primary stage:

- providing teacher generated learning activities
- promoting learning by doing, discovering, and experimenting
- developing individual, group and whole classwork
- providing for individual differences
- using the local environment
- creating an interesting classroom by displaying children's work and organising it effectively.

Training programmes
The introduction of APPEP has laid stress on in-service education and training. All serving teachers are to be inducted through an initial training course of ten days to be followed by a further three days after two to three months. In between the courses, teachers attend a meeting at the Teachers' Centre to which their school is attached. After the three-day follow-up course, the teachers meet regularly six times a year at the Teachers' Centre for activities which will subsequently enable them to implement APPEP ideas.

The meetings are also opportunities for the teachers to discuss problems and generate possible solutions. Pre-service education and training for teachers was previously provided at Teachers' Training Institutes (TTI) which specialised in pre-service training. Under Government of India policy TTIs have been converted into DIETs and given a wider responsibility for educational development at the District level than the old TTIs. Pre-service education and in-service training are still major components of their work. It is expected that where possible their pre-service programmes will emphasise activity-based learning.

The in-service training programmes developed by the project are modelled on the Cascade System. In the system the DIETs play a vital role. The DIET staff members are trained by the Project headquarters staff for a period of eighteen days. Some staff members of the DIET also attend a three month special course at the University of London Institute of Education (ULIE).

The DIETs in turn organise the following training programmes:
- eighteen-day courses for Mandal Education Officers (MEOs)
- twelve-day courses for Mandal Resource Persons (MRPs)
- eighteen-day courses for 480 primary teachers in a year.

The MEOs and MRPs together then organise ten-day training programmes for primary teachers at Mandal level. An important characteristic of the structure of courses is a ten-day module which is common to all the courses.

A summary of different courses, their duration and the people responsible for running courses is given in Table 2.

Table 2: Training courses for APPEP

COURSE	DAYS	PARTICIPANTS	NATURE OF COURSE	VENUE
I A/B	18	DIET/HRD	Induction	HQ
II	2	MEOs	Orientation	DIET
III	18	MEOs	Induction	DIET
IV	12	MRPs	Induction	DIET
Va	18	Teachers	Initial in-service	DIET
Vb	10	Teachers	Initial in-service	Mandal
VI	3	Teachers	Follow-up	TC
VII	3	TC Secretary	Orientation	HQ

Professional support mechanisms

To implement and to develop confidence in introducing change, continuous professional support is provided to those who have to introduce the change. In APPEP, Teachers' Centres (TC) are being established to provide opportunities for continuous professional growth through a mutual support system.

TCs provide opportunities for teachers to share experiences and develop pupil and teacher material for use in the classroom. It is through these TCs that new ideas about the projects are introduced to the teachers. A TC serves about twenty-thirty teachers from schools within a five kilometre radius. The headmaster of the school acts as the TC Secretary who is regularly supported by the MEO. Six one day meetings are held per year at the TCs.

The Mandal Education Officer is responsible for providing guidance to teachers at Mandal level and help in district administration.

The impact of aid agency projects

Implementation of the 'Basic Education of All' programme is mainly a national effort in India. Aid agency projects are limited to major interventions in three states: Bihar, Rajasthan and Andhra Pradesh. A fourth project, to be assisted by the World Bank, is still at the planning stage for the state of Uttar Pradesh.

The three projects currently being financed by ODA (APPEP), UNICEF (BEP) and SIDA (Shiksha Karmi Project in Rajasthan) are not projects directed to mere teacher training. These are projects to assist in the process of achieving universal and improved elementary education for all children up to the age of 14. Hence all of these projects focus on enhancing access to educational opportunities as well as improving the quality of education. APPEP covers the whole state of Andhra Pradesh and confines itself to the formal primary schools. The Shiksha Karmi Project in Rajasthan is a very novel approach which is being tried out in 2000 schools. It covers formal and non-formal modalities. The BEP is a comprehensive project aimed at reconstruction of the whole education system including adult education and the management of Basic Education.

Teacher training is a vital component in each of these projects. On the one hand APPEP and BEP are utilising the existing teacher training infrastructures/institutions (DIETs), on the other hand they are designing alternative, specific, tailor-made induction courses as well as short training interventions to provide continuous support to all involved. The Shiksha Karmi Project in Rajasthan takes untrained local village teachers with only eight years of education and so is different from the other two projects: the effectiveness of this model remains to be seen. The BEP also makes use of the Shiksha Karmi model in a limited way.

The strategies employed by the Aid Agency Projects in India appear to be quite effective and capable of being sustained. The reason is that these projects are being planned and implemented within the broad framework of NEP and the POA. The state education departments are implementing these projects as their normal developmental projects with affordable recurring costs. The APPEP has already demonstrated its sustainability by adapting itself to new developments and challenges. The achievements of the Shiksha Karmi Project are currently being evaluated. The BEP is still at the take-off stage and some time should be allowed before its sustainability can be judged.

The experience of these state level projects however leads to the following very clear messages:

1 Initial programmes of teacher training must be supported by continuous short training interventions focused on the specific changes to be introduced in elementary schools.
2 Initial teacher training programmes must be overhauled and redesigned to meet the actual needs of the teachers, students and conditions of school/class rooms.
3 Teacher education programmes based on broad general theories of teacher/learning are not very helpful. If the Shiksha Karmi Project proves successful, it will raise fundamental questions about the content and duration of initial training as well as the minimum entry qualification of teachers.

Bangladesh

Introduction: background

The country has a population of approximately 110 million crowded in a territory of 140,000 square kilometres of deltaic, flood-prone land. The state was born only in 1971. With a per capita income of about US $170, it is one of the poorest nations of the world. About 75 per cent of its people live below the poverty line. Roughly 85 per cent of the population live in rural areas and over 75 per cent of the nation's labour force is employed in agriculture. There are four major religions: Islam is the religion of the majority (85 per cent) followed by Hinduism, Christianity and Buddhism. 98 per cent of the people speak Bangla and take pride in it.

The literacy rate in Bangladesh is one of the lowest in the region, being about 26 per cent in 1987. Primary enrolment registered a marginal increase, moving from 60 per cent in 1986 to 67 per cent in 1989. Broadly speaking, formal education comprises three levels: primary, secondary and higher. Pre-primary education is offered by a few private institutions, mostly kindergattens of different types and a few thousand mosque schools known as Maktabs.

The duration of primary education is five years (I-V) beginning at the age of six.There are 44,200 primary schools in the country, of which 36,698 are government schools and the rest are private. The private schools are being gradually brought under the government system. The total enrolment in 1987 was around 1,01,00000. Primary schools take in a large number of under-age children and these are informally accommodated in so-called baby classes. Teachers normally work a two-shift day, teaching the baby class, Classes I and II, for approximately two hours in the morning, and Classes III, IV and V for two and a half hours in the afternoon.

Teacher education

Secondary

For the secondary level of education, the ten Teacher Training Colleges (TTCs) and Institute of Education and Research (IER) offer a one-year degree of Bachelor of Education (B Ed). An experimental two-year B Ed training programme through distance learning was introduced in 1985. Approximately 75 per cent of the teachers of secondary schools have had no professional training. The IER at Dhaka University offers specialised degree programmes leading to a M Ed and PhD in Education. Research on various aspects of education is conducted by IER.

Primary

Teacher education is offered for primary schools in fifty-three Primary Teacher Training Institutes (PTIs). These PTIs offer a one-year Certification in Education Course (C-in-Ed). Approximately 95 per cent of the primary teachers are trained. Recently a Higher Certificate-in-Education (HC-in-Ed) course has been introduced in four PTIs for

prospective headteachers of primary schools. A proposal for introducing B Ed(Primary) is under consideration in the Ministry of Education.

The National Academy for Primary Education (NAPE) is another important national level institution which was created to play a leading role in improving the quality of primary teacher education. Unfortunately this institution has not been functioning very effectively. Its major activities have been limited to conducting examinations for the one-year teacher education programme offered in the PTIs and organising competitions for giving awards to the best teachers. The Primary Education Projects, aided by external agencies, have, in recent years, devoted special attention and resources for strengthening NAPE.

The National Curriculum and Textbook Board (NCTB) is responsible for the development/improvement of the curriculum for primary schools, as well as the curriculum for primary teacher training. Recently NCTB has been involved in the development of revised curricula/syllabi for pre-service and in-service training of teachers. Though NCTB is an autonomous body, it is responsible to the Ministry of Education which guides and supervises its policies and programmes. The major implementing agency for the Universal Primary Education (UPE) programme is the Directorate of Primary Education under the Director-General (DG, PE), who controls all PTIs and NAPE.

In-service training of teachers is arranged though cluster-training and refresher courses.

As part of its plan for achieving 'Basic Education for All' Bangladesh attaches priority to Universal Primary Education. The National Plan of Action (1989) states this priority as follows: 'In order to achieve Basic Education For All by the year 2000 in Bangladesh, the base of development and spread must be retained and expanded. Enrolment through Universal Primary Education (UPE) has covered 67 per cent of the primary school age children in Bangladesh by 1989. That level of achievement must be held and improved. In addition, during the nineties (1990-2000), primary education must be made as widespread as possible by making it compulsory and visibly relevant. The enrolment rate needs to be increased from the present 67 per cent to 90 per cent'.

Priorities in Initial Teacher Training

The teacher is crucial in the implementation of UPE. The practice in the past was to require all teachers in the government primary schools to have completed at least 10 years of high school and to have passed the SLC examination. In recent years, in order to attract better teachers, there has been a change in the policy. SLC graduates are now recruited and posted as teachers in primary schools before they are seconded for training in the PTIs at government expense. Thus, even the first initial training is provided while they are already in service.

The teacher training programme offered by the PTIs is too theoretical, outdated and irrelevant to the present day needs of UPE and to the conditions of work which the teachers will find once they go into the

classrooms/schools where they are posted. It does not equip them with the necessary skills, attitudes, role perception and know-how to:

- teach large classes with a teacher/student ratio of 1:52
- achieve minimum levels of learning
- ensure enrolment and retention of children by co-operation with the community
- make the learning process interesting and meaningful through learner-centred and activity-based approaches
- take care of the special learning needs of children from disadvantaged sections of the community through appropriate remedial teaching exercises, thus ensuring equality of opportunity
- practice continuous pupil assessment in order to improve the quality of teaching and to ensure the attainment of minimum levels of learning: an essential requirement of the policy of liberal promotion introduced by the government of Bangladesh in Classes I and II in 1986.

A major exercise is currently underway to overhaul the initial one-year teacher training courses in the PTIs. The major focus of this is to restructure the syllabus and to revise the approach so as to involve the trainees in practical exercises, thus ensuring the attainment of the competencies and skills which are necessary to implement UPE. An attempt is also being made to align the teacher training programme with the demands of the new competency-based curriculum being introduced in primary schools of Bangladesh through a phased programme beginning with Class I from the school academic year 1992.

The new primary curriculum and materials are being developed by NCTB through a comprehensive programme based on research, trials and the defining of Essential Learning outcomes for the primary stage of education. The Directorate of Primary Education (Teacher Training section), in collaboration with NCTB, NAPE, representatives of PTIs, IER, and other educationists/consultants have identified the competencies to be developed in the one-year programme of initial training. These competencies provide guidance for developing the syllabi, approaches, activities, materials, etc. for teacher training. The limiting factor is that PTI instructors and NAPE staff are generally the product of secondary teacher training colleges. Efforts are being made to orient the teacher educators, but it will take some time to break this vicious circle and institutionalise the positive practices related to UPE.

In-service training

The generalised enrichment refresher/in service courses which have been in vogue in Bangladesh for some time are now being gradually replaced by more need-based in-service programmes specifically addressed to the implementation of the new thrusts of UPE.

School-based in-service

An example of such a programme is the school based cluster in-service education system implemented by Assistant Upazila Education Officers (AUEOs). The programme was first tried out in 44 Upazilas. The success of the programme led to its countrywide adoption and it now covers all the 160,000 teachers of the 37,000 Government Primary Schools. About 1834 AUEOs have been appointed, each covering 20-25 primary schools and visiting every school at least once in a month. Special leaflets have been prepared on selected themes and distributed to the schools and AUEOs for organising school-based recurrent in-service education. Such a programme can go a long way to improve the quality of primary education.

There are limitations, however.

1 The orientation/induction courses for the AUEOs are of crucial importance. The assumption that a ten-day induction programme can equip the AUEOs with adequate leadership skills and competencies to initiate new teaching behaviours in the teachers is not realistic. Most of the AUEOs come from a secondary background. Institutions like DPE, NCTB, and NAPE need to monitor the AUEOs constantly to reinforce their understanding of the new thrusts of UPE and to help them acquire the necessary skills. This national level monitoring is quite inadequate at the present time.
2 The leaflet-based approach makes the in-service sessions too formal and structured with the teachers studying together the printed leaflets. A broader and more flexible approach to in-service training sessions, with more focus on the actual problems of different schools/communities and on teacher participation/involvement through discussion and activities may bring better results.

Induction training programmes for the new curriculum

Through a well-designed curriculum renewal programme, NCTB has evolved and tried-out the revised curriculum for primary schools of Bangladesh. The new curriculum package consists of:

- an Essential Learning Continuum (ELC) for classes I - V based on the Essential Learning outcomes to be attained by children through the primary cycle of education
- new textbooks based on ELC
- teacher guides based on new textbooks
- teacher guides in Bengali language and mathematics to help teachers organise remedial instruction and test children's achievements to ensure mastery learning: these are based on the learning difficulties of children identified through research projects
- teaching aids
- a simple scheme of continuous pupil assessment.

The curriculum package is being introduced in the national primary schools through a phased programme beginning from Class I in the school year 1992. Initial ten-day induction training programmes have been

organised for all headmasters and teachers of primary schools based on well-designed training packages. These training packages include printed training materials and videotapes of teaching demonstrations by ordinary primary school teachers. How far these training programmes will succeed in initiating a process of qualitative change in the classrooms remains to be seen.

Bangladesh Rural Advancement Committee (BRAC)

Bangladesh Rural Advancement Committee (BRAC) started a Non-Formal Primary Education Programme (NFPE) in 1984. The target students of the BRAC schools are the 'unreachable'; those children that research has shown have been deprived of access to education because of poverty and gender. Thus the children selected for the BRAC schools come from the poorest of the landless families.

BRAC has been implementing two models. The first called Non-Formal Primary Education (NFPE) is a three year programme for children of 8-10 years who have never enrolled in school or who have dropped out. The second model started with an experiment in 1988 and offers a two year programme for children 11 to 14 years old who have never been to school. This programme is called Primary Education for Older Children (PEOC). The total number of schools of both types is about 2230 with an enrolment of 66,900 students (1989).

A typical BRAC school is a single teacher school where a batch of 30 children completes the course under the guidance of the teacher. The school looks like a village house with bamboo walls and thatched roofs and can accommodate 30 children on mats.

The NFPE course comprises functional literacy, numeracy and social studies including health, hygiene and basic science. The school sits for two and half hour each day, six days a week and there are no long vacations as these hamper learning. Out of each day's session forty minutes are devoted to cross-curricular activities such as physical exercise, singing, drawing, crafts, etc. Books and supplies are given free and the teachers are paid a honorarium.

The curriculum in BRAC schools differs from that of the government schools in several significant ways, although the major differences between the two systems are not as much in content as in teaching methods and teacher commitment. Basic reading, writing and arithmetic are similar in the first two years. In the third year the maths taught in the BRAC schools is quite different from that in the formal schools, since it emphasises real-life maths like simple accounting, measurement and money. BRAC's social studies programme is almost totally different, focusing on health concerns, co-operation with others, relationships with neighbours, population problems, issues of early marriage and dowry, and so on.

Most of the teachers are women who have had a minimum of nine or ten years of schooling. They receive a short intensive basic training course lasting twelve days. The training emphasises basic concepts and practice teaching. The teachers use participatory but structured methods that are learner-centred.

The schools do not have formal examinations but follow techniques of continual assessment through weekly and monthly tests to evaluate the children's performance.

Due to the small classes the teacher is able to pay individual attention to slow learners. Such pupils are also helped by their class mates. BRAC teaching is intended to be learner-centred and participatory. The BRAC schools want the children to be active participants in learning, rather than passive recipients of information. The natural inquisitiveness of the children is encouraged. Because the BRAC classes are much smaller than the government classes, the children can participate more actively.

BRAC encourages the enrolment of girls, who now constitute 70 per cent of the pupils, for the reason that women with some education, however little, are more receptive to new ideas and are likely to have smaller and healthier families.

The success of NFPE depends largely upon community participation. Each school is administered by a committee made up of two parents, a community leader, the teacher and the NFPE supervisor. Their role is to keep class attendance regular by motivating parents. This is helped by the fact that the short school day leaves time for children to help out at home or in the fields.

NFPE is satisfied with an attendance rate of over 90 per cent and a dropout rate of under 2 per cent. Almost all of the children who have completed the 3-year course are continuing education in public schools in Class IV. In 1986 BRAC introduced English at the latter part of the second year (8-10 year age group) so that children admitted in the formal school in Class IV do not face difficulties. The high success rate indicates the enthusiasm of both children and parents. Because of this NFPE is a fast expanding programme, with BRAC already operating in about 4000 schools. .

BRAC schools are very disciplined, but teachers are not supposed to punish students. Unlike the formal schools, the teachers are expected to set an example for attendance and punctuality. The BRAC teachers are under contract, they are not tenured. Teaching is not a sinecure for life to be held regardless of performance. The school setting is highly structured. In most villages the relationship between teacher and student in the BRAC schools is close because of the small class size and because the students stay with the same teacher for all three years.

BRAC teachers are paid a very small monthly stipend, currently 350 taka per month (about US $10) the first year, 375 taka the second year, and 400 taka the third year. There is almost no employment for women in the villages so working as teachers gives them a small, regular, year-round income and respected status, an important fallout of the programme. The teacher dropout rate is less than two per cent, with teachers resigning only if their husbands must move away.

Teacher training

The initial twelve days of teacher training, held in residential centres, emphasises the basic concepts of learning theory and practice teaching. Five

days are spent on concepts and seven days on role-playing as teachers and learning how to prepare lesson plans.

Teachers are trained in groups of 20 to 25. The training is participatory and learner-centred. Trainees are introduced to teaching materials, books and accompanying teaching notes, and to the use of teaching aids. They use such aids as charts, picture cards and counting sticks. They are taught to utilise peer assistance methods; for example, scattering the bright children so they can help others, assigning stronger students to help the weaker, and so on. They are taught never to punish a child but to use other methods of discipline. Comprehension rather than memorisation is stressed. Teachers are taught the importance of class routines and they are given a general structure that must be followed, although they may vary the timing a little. The teacher-trainers are trained by educational specialists working together with BRAC.

All teachers attend continuing teacher training sessions one day each month (refresher days). Teachers from about 20 to 25 neighbouring villages meet with their supervising programme organiser to discuss problems and to work on teaching learning issues. Teachers of each grade have different refresher days, first grade teachers together, second grade teachers together, and so on. Discussions centre around identified problems, the more experienced and better teachers participating and helping the weaker teachers. Sometimes, in addition to the monthly training days, a good teacher from one village will visit a teacher in a neighbouring village to assist with problem-solving. Also, all teachers attend a six-day refresher training course in the second year.

Results and cost analysis

The first five years of BRAC schools has shown that poverty and gender are not insurmountable obstacles to primary education. Rural poor people want education for their children. All evaluations of the BRAC schools have reported that one of the most important factors in their success is community and parent participation.

This alternative model has demonstrated that para-professional teachers, quickly trained and paid only a small stipend, can be effective if carefully selected and backed up by consistent supervision and community support.

The annual cost per student borne by BRAC is about US $15 per student. This per capita figure covers the full cost of the programme, including rental of facilities; teachers' honoraria, training, recruiting and supervision; materials, and curriculum development and management. The parents and the community bear the cost of providing the facility at minimal rental and the opportunity cost of losing the labour of their children a few hours each day.

The chief strengths of the Bangladesh system

1 Competency-based revised one-year teacher training curriculum with special reference to aligning with the new primary school curriculum.
2 School-based cluster level system of recurrent in-service training through the Assistance Upzila Education Officers.

3 Ten-day induction training package for introducing new competency-based primary curriculum.
4 BRAC Model of induction-training for para-professional teachers employed in the non-formal primary centres.

The impact of aid agency projects

In Bangladesh, aid agency projects have played a prominent role in advancing the programme of UPE in quantitative as well as qualitative terms. Two Primary Education Projects financed by aid agencies have been completed from 1980-89. The third General Education Project which has a large Primary Education component started in 1989 and is currently in the process of implementation. These projects have helped in the following ways:

(a) improving the access to basic education by creating new primary schools and supplying free textbooks;
(b) improving the quality of primary curricula through providing assistance and financing the development of new curricula and materials, and improved teacher-training curricula;
(c) evolving alternative and complementary systems of recurrent programmes of in-service education, and financing the large scale training programmes for teachers and other functionaries;
(d) improving the management of UPE through:
- the setting up computerised management information systems at the national level
- evolving decentralised administrative structures at the district and upzila levels
- training management personnel at each level.

Main features of aid agency projects

1 One noteworthy feature of the work of the aid agencies has been their acceptance of the one National Programme, each agency making its contribution to its implementation.
2 Another strong feature is that the agencies have been participating in Primary Education Projects in Bangladesh continuously since 1980. This means that each new project can build on the foundation and structures provided by the previous one. New projects have thus gained from the insights and the mistakes of the previous project. This continuity of the projects has helped the developmental process and the sustainability of previous programmes.
3 The major aid agencies involved in Primary Education in Bangladesh are The World Bank, Asian Development Bank, UNDP, SIDA, Unesco and UNICEF. The World Bank has successfully played a leading role in co-ordinating the inputs from the other aid agencies. The mutually supportive and complementary roles of these agencies provides a model which may be shared with other countries of the region.

Conclusions

1 Both India and Bangladesh recognise the vital role of teacher education in achieving the goal of 'Basic Education for All' with minimum levels of learning.

2 Teacher preparation is seen as a continuous programme rather than a one-shot affair.

3 Initial training is seen as an important input for inducting the teachers into the teaching profession.

4 Shorter and specially designed initial teacher preparation interventions are being undertaken to achieve the new thrusts of Universal Basic Education.

5 While the two countries have been able to evolve a clear vision of what kind of Basic Education they need, the necessary skills and competencies to achieve it are lacking - in teachers, teacher educators and administrators. Past experience and the traditional methods of teacher-training in these countries are not very helpful in meeting the new demands of Universal Basic Education. The present hierarchical mode of training needs to be replaced by a participatory learning cum training mode. The training/induction programmes need to be participatory so that trainers and trainees work together when going through the relevant learning experiences, focusing on the competencies/skills/understandings they need to acquire for performing their roles effectively. This training mode will also help them to provide mutual support to one another in the joint mission of achieving the goal of Universal Basic Education.

6 There is a growing consensus that primary teacher-training institutions alone cannot meet the challenge of preparing teachers for the new demands of Basic Education. Hence, a mutually supportive strategy for networking between the various institutions, whether PTIs, Colleges of Education, University departments, Curriculum and Research centres, etc. needs to be evolved.

7 Teacher-training should be seen not as an end in itself, but as a means for facilitating the effective transaction of learning in the Basic Education Institutions - formal as well as non-formal. Therefore, teacher-training is increasingly being designed as a component of more comprehensive projects aimed at improving the quality of education in primary/elementary schools and non-formal centres.

8 The aid agencies are playing an active role in launching/assisting new initiatives which demonstrate alternative strategies for achieving Universal Basic Education, using appropriate teacher preparation modalities as an important component.

Suggestions

While these countries welcome the financial assistance offered by the aid agencies projects, specially the grant monies, there is a growing resistance to the traditional component of Technical Assistance (TA) which provides expatriate resident Technical Advisers. It seems that this hurts their national

egos, the countries feeling that they have sufficient expertise themselves to help in planning, monitoring and implementing basic education programmes. Yet they are very keen to learn from the experience of other countries through visits and exchange of experience/materials. Hence, the strategy of providing technical assistance through aid agency projects needs to undergo a major change.

One possible strategy, in my view, would be through planning and undertaking joint inter-country, comprehensive projects addressed to quality improvement in basic education institutions. Broad-based country teams representing the Ministries of Education, Directors of Primary Education, teacher training institutions, Curriculum Development Centres, Colleges of Education and University Departments of Education should participate in these projects. Care should be taken that the designated participants are actually involved in the process of planning and implementing the project in their respective countries. The project should provide technical guidance and the opportunity for inter-country exchange of ideas right from the planning stages. The project teams should bring their draft plans and strategies to inter-country meetings. This would provide an opportunity to reconsider, revise and refine their plans through discussion and the exchange of experience with other countries. The participants would then go back to their respective countries and be able to implement the project with total freedom, evolving the materials, methods and practices most suited to their socio-economic/cultural context and level of preparedness.

The aid agencies could pool their resources to create a Technical Assistance Team of Experts to monitor and guide the implementation of the projects. The headquarters of the TA Team could rotate from country to country each year. Members of the TA Team could provide specific in-country support only if a country needs it and asks for it. The TA Team would however, continue to provide technical support and opportunities for the periodic exchange of experience and materials by organising meetings, workshops and seminars for the participating countries. In my experience, the duration of technical support is a critical factor in the sustainability of programmes, so the project duration should be at least five years .

The advantages of the pooled participatory TA strategy would be:

1 It would not hurt the national ego of the countries and yet would provide the necessary technical assistance and know-how to facilitate effective implementation of the national projects and to promote the professional competence and leadership of the national teams.
2 Through rotation of headquarters, the TA Team would have first-hand experience of project implementation in each of the participating countries.
3 The project would provide opportunities for inter-country learning and the exchange of experience.

4 The project would generate intra-country learning programmes. Each country would report back to the inter-country group the present status, problems and future directions of its project. They would also need to receive teams from other countries and demonstrate their successes and share their limitations. This process is likely to generate momentum and help in institutionalising the successful experiences.

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Appendix 1: Teacher education at different levels in India

Stage No.	Teacher Training Course	Stage for which teachers trained	Duration (Years)	Entry qualification	Type of Teacher Education Institutions	Administrative control
1	a) Nursery Teacher Trg b) Pre-primary Trg	Pre-primary	1/2	Matriculation Higher/Sr Sec	Nursery Teacher Trg Insitutes/ Pre-Primary Institutes	State Dept of Education
2	a) Junior Basic Trg b) Basic Trg Certificate c) Dip in Education	Primary/ Elementary	2	Matriculation/ Higher/Sr Sec/ Intermediate	Jun. Basic Teacher Trg/District Institutes of Educ & Trg/ Basic Trg Institutes	State Dept of Education
3	Multi category Trg for Special Education	Elementary	1	Sr Sec/ Intermediate	RCE	NCERT
4	Bachelor of Education (B Ed)	Middle/Sec/ Sr Secondary	1	Graduation/ Post-graduation	Colleges of Ed/Teacher Trg Institutes/Ed Depts in Universities	College Management/ University
5	B Ed (Special Education)	Middle/Sec	1	Graduation	University Depts/Units in Special Ed in Colleges of Ed	University & College Management
6	Master of Education (M Ed)	Lecturers/Teacher Educators at elem & sec levels	1	B Ed	Colleges of Ed/Sec Teacher Trg Institutes/Ed Depts in Universities	University & College Management
7	Master in Special Ed (M Ed Spec Ed)	Teacher of Sec Schools/Teacher Trg Institutions	1	B Ed (Spec Ed) B Sc Child Dev with Spec Ed degree in any disability with educ	University Depts/Units in Special Ed in Colleges of Ed	University & College Management
8	Master of Philosophy (M Phil)	Lecturers	2	M Ed	Institutes of Advanced Study in Education/University Depts	University
9	Doctorate of Philosophy (PhD)	Readers, Professors & Deans of Educ Faculties	2/4	M Ed/M Phil	Institutes of Advanced Study in Education/University Depts	University

* Regional Colleges of Education of the NCERT also offer four year integrated B Ed, one year B.Ed (Elementary) and one year M Ed (Elementary) Programmes

Appendix 2: Abbreviations

NEP	New Education Policy (1986)
NCERT	National Council of Educational Research and Training
UT	Union Territory
ETEI	Elementary Teacher Education Institute
UEE	Universal Elementary Education
POA	Programme of Action
DBE	District Board of Education
DIET	District Institute of Education
B Ed.	Bachelor of Education
NIEPA	National Institute of Education in Planning and Administration
SCERT	State Council of Educational Research and Training
NFE	Non-formal Education
NCTE	National Council of Teacher Education
MHRD	Ministry of Human Resource Development
CIET	Central Institute of Educational Technology
UGC	University Grants Commission
PMOST	Centrally Sponsored Programme of Mass Orientation of School Teachers
UNICEF	United Nations Children's Fund
MLL	Minimum Levels of Learning
BEP	Bihar Education Project
AE	Adult Education
APPEP	Andhra Pradesh Primary Education Project
GAP	Government of Andhra Pradesh
HRD	Human Resource Development
TTI	Teacher Training Institute
HQ	Headquarters
ULIE	University of London, Institute of Education
TC	Teachers' Centres
PTI	Primary Training Institute
C-in-Ed	Certificate in Education
Hc-in-Ed	Higher Certificate in Education
TTC	Teachers' Training College
IER	Institute of Education and Research
M.Ed	Master of Education
PhD	Doctor of Philosophy
NAPE	National Academy for Primary Education
NCTB	National Curriculum and Textbook Board
UPE	Universal Primary Education
DG, PE	Director General, Primary Education

SLC	School Leaving Certificate
AUEO	Assistant Upazila Education Officer
DPE	Directorate of Primary Education
ELC	Essential Learning Continuum
BRAC	Bangladesh Rural Advancement Committee
NFPE	Non-formal Primary Education Programme
PEOC	Primary Education for Older Children
TA	Technical Assistance

INITIAL TEACHER TRAINING IN PAKISTAN

HAROONA JATOI

Introduction: background

Since teachers are a very important part of any education system, all efforts for the betterment of education should focus on them. Unfortunately, in Pakistan, there are many teachers in the system who are not professionally qualified. Moreover, adequate facilities do not exist to expose them to the latest instructional technology.

At the time of the emergence of independent Pakistan in 1947, the entire education system of the country was geared to producing a class of people who could service the bureaucracy to perpetuate the old socio-economic order in the country. The socio-economic order was designed by the colonial powers. All curricula, textbooks and teaching materials were devised to serve the cause of imperial rule. The new country needed a dynamic and progressive education system (Unesco, 1990).

Since the creation of Pakistan several five year development plans have been formulated for the implementation of educational and other social sector policies (see Table 1).

Table 1: Development plans

First	1955-60
Second	1960-65
Third	1965-70
Non-plan	1970-78
Fifth	1978-83
Sixth	1983-88
Seventh	1988-93

There have also been several educational policies in the years since Pakistan became independent (see Table 2).

Table 2 : Educational policies

All Pakistan Education Conference	1947
Educational Conference	1951
Commission on National Education	1959
Commission on Student Problems & Welfare	1966
New Education Policy	1970
Education Policy	1972-80
National Education Policy	1978
Action Plan for Educational Development	1983-88

The Commission on National Education (1959) observed that teachers 'should be academically well trained in the subjects they teach; they should have sound professional training in how to teach the subjects'. The Third Five-Year Plan, emphasising the qualitative aspect of teacher education, commented that 'the improvement and expansion of the school system depends upon the quality and number of teachers... the teacher and their education must receive the highest priority'.

The National Education Policy (1979), pointed out the poor standard of teacher education, and stressed the need for upgrading its quality 'by providing adequate facilities both for pre-service and in-service training programmes'. Of the eight recommendations for improving the quality of teachers, two were: 'strengthening of the Provincial Education Extension Centres and In-Service Training Centres in the provinces so as to enable them to provide at least one in-service training facility to every teacher during every five years; and the strengthening of the in-service training facilities of Allama Iqbal Open University'.

As the implementation of educational policies and related recommendations are through development plans, new programmes or the extension of old ones require commensurate financial allocation but this is not properly reflected in Five-Year Plans, and recommendations are therefore not implemented. The Fifth Five-Year Plan allocated 5.1 per cent of its Primary Education budget to teacher education, which appeared to be an improvement on previous practice. The Sixth Plan, however, instead of increasing the budgetary allocation, slashed it down to 1.5 per cent which certainly was a retrogressive action. The Seventh Plan has been a little more generous yet the allocation falls short of the requirements.

Actual expenditure incurred on teacher education during various Plan periods can be seen in Table 3.

Table 3: Expenditure on teacher education

Plan I	Rs 4900 million
Plan II	Rs 17,400 million
Plan III	Rs 15,050 million
Non-plan period	Rs 114,010 million
Plan V	Rs 290,300 million
Plan VI	Rs 131,837 million

Research on teacher training

It has been usually assumed that the academic qualifications and professional training of teachers have a direct and positive bearing on the quality of teaching performance. Effective teaching is determined by both subject-matter knowledge and pedagogical skills (Schiefelbein and Simmons, 1921). Doyle (1990) argues that the 'conception of teaching as a curriculum process is offered as a framework for inquiry into the experienced curriculum in classrooms' and, thus, 'as an approach to understanding the nature and acquisition of teachers' curriculum knowledge'. He calls for the

> ... study of teaching content as discipline to curriculum as classroom event, because herein lies the knowledge teachers must have of the content if it is to become pedagogical substance in the lives of students. (p.28)

Evidence from developed countries shows a strong positive connection between teacher subject matter knowledge and student achievement. But only a few studies from developing countries have investigated this question (Fuller, 1987).

Although it is believed that the ability of teachers improves in a linear fashion with their level of general education, in countries with high rates of population growth the rapid expansion of the primary education system has necessitated reducing the length of general education attained prior to entry into teacher training (Unesco, 1988 quoted in Lockheed and Verspoor, 1989, p.74). In Nigeria only five years of primary education were required for entry to teacher education in 1981; this was the lowest minimum teacher's education requirement for all the African countries at the time (Zymelman and Destefano 1989 quoted in Lockheed and Verspoor, 1989, p.74). In Pakistan, even in 1990, there are teachers with less than eight years of schooling; in some of the less developed areas in Pakistan, teachers' schooling is five years only.[1]

But the basic assumption still remains that the more teachers are academically as well as professionally prepared the more likely they are to do a better job. The evidence to support this notion comes from developed

[1] In Pakistan the population is estimated to be 114 million: women make up almost half of the population (there are 100 women per 111 men).The literacy rate in Pakistan is 26.2 per cent according to the 1981 Census (men 35 per cent and women 17 per cent), and there is a wide disparity between the urban and rural population. To be more specific, the literacy rate for both sexes in urban areas is 47 per cent as compared to 17 per cent in rural areas. Even within each setting, the male/female disparities are pronounced. For example, 55 per cent of urban males as compared to 37 per cent females are literate. In the rural areas, where the overall literacy rate is 17 per cent, only 7 per cent of females are literate in comparison with 26 per cent of males.

countries (Saha, 1983) as well as from developing countries (Lockheed, 1989).

Husen *et al* (1978) give the following conclusions based on the general assessment of 32 studies within the context of 16 teacher variables:

> Trained teachers do make a difference in student achievement in LDCs. In particular it seems clear that teacher qualifications, experience, amount of education, and knowledge are positively related to student achievement. (p.37)

Rust (1990) puts it in a slightly different manner:

> To illustrate the theoretical and methodological problems inherent in many attempts to reform teaching, C.E. Beeby argues that it is an evolutionary process, the key being teachers' ability to promote change. This ability is itself a function of teachers' confidence, itself partly a function of their levels of general and professional education. (p.221)

Rust synthesises the research findings regarding teachers and teaching in the developing world and suggests:

> ... that the training, experience, qualification, age and sex of teachersmay be significantly related to their performance, though in different ways, according to subject and level of class taught. (p.131)

Similar findings were presented by Chapman and Synder (1989, p.17). They indicated that 'at least in Botswana, teachers differing in levels of training did significantly differ in their in-classroom teaching behaviours, though not necessarily in ways that would raise student achievement'. Their analysis explained the tendency for the more highly trained teachers to exhibit behaviours that favour the 'quality of worklife' over student achievement.

Ligons (1990) evaluated key innovations for teacher training in Thailand since 1980. She presents a similar point of view regarding teachers' training. She concludes:

> Teachers vary in terms of their commitment to teaching, in terms of their scholarship, and their presentation for teaching. Organised training programmes can minimise the disparity in levels of teacher competency. As the gap narrows in the qualifications of teachers, the gap in educational quality should also narrow, leading to greater consistency in student performance in urban and rural settings. (p.13)

But there are differences of opinion about teacher training, as in some countries the training received is mediated by other factors and does not contribute to teaching effectiveness.There is some evidence of the limited effectiveness of teacher training (Avalos, 1985).

Warwick, Nauman, and Reimers (1991), in the most recent study of teacher training in Pakistan, present a similar finding:

> The present system of training primary school teachers in Pakistan makes a small difference to how teachers teach and how their students learn. (p.2)

'Teacher certification does not differentiate good from poor schools.' In summary, it appears that teacher training can be but is not always a means to improve teacher effectiveness.

Teacher training in Pakistan

The training of teachers consists of pre-service and inservice programmes and financial allocations have to be proportionately distributed.The following describes the present system and facilities for both pre-service and in-service teacher training in Pakistan.

Pre-service training

As reflected in the literature from both developed and comparatively less developed countries, it is evident that preservice teacher training does make a positive contribution to the teaching profession. Keeping this in mind we can assume that fresh from college or school graduates cannot perform as well as their professionally trained colleagues, who know modern teaching methodologies. In Pakistan, the preference in appointments is always given to the trained teachers but as mentioned earlier, there are exceptions where there is a need for more women teachers and and in remote areas.

There are three major pre-service training programmes for primary teachers. These relate to professional training before entry into service and also include the imparting of requisite training after entry into service in the case of those who joined the profession as untrained teachers.

Colleges of Elementary Teachers

Teacher training institutions, called Colleges of Elementary Teachers, provide one year's professional training to those who have completed ten years of schooling (Matric)[2]. They are required to take ten courses - three related to general education theory and six to methods of teaching.

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[2] The categories in formal education are as follows:

Primary (five years of schooling)
Middle (eight years of schooling)
Matric (ten years of schooling)
Fellow of Arts (FA)
Fellow of Science (FSc)
Bachelor of Arts (BA)
Bachelor of Science (BSc)
Master of Arts (MA)
Master of Science (MSc)

Teaching practice, comprising short term and long term practice, spreading over six weeks, forms an integral part of the training.

Those who successfully complete the course are evaluated by the Directorates of Education, and are awarded Primary Teachers Certificate (PTC.)[3]. However, for qualifying to teach in middle schools the trainees, who should have passed Intermediate Examination (FA/FSc), undergo one year's training in the same College for Elementary Teachers and on successful completion, are awarded the Certificate in Teaching (CT).

The training sets out to equip the teacher trainees with the basic knowledge, educational theories, principles of learning and also the teaching skills which may enable them to undertake the mental and educational development of their students. Other objectives include the development of creative approaches to teaching, the preparation of indigenous audio-visual aids, the ability to integrate the content of various subjects and the learning of appropriate methods for teaching different subjects.

This training, spread virtually over nine months and given to trainees with the minimum basic qualifications, leaves much to be desired. It is too short to have much effect on the attitudes of the participants. Moreover, it is imparted by trainers some of whom are not themselves qualified, e.g. subject specialists may be one time headmasters, considered unsuitable for holding administrative posts and thus sent to training institutions. Such teaching faculties cannot do justice to their new assignments.

As regards the curriculum being taught in these institutions, The Curriculum Research and Development Centre, Lahore, on the basis of an in-depth evaluation study of PTC Curriculum, remarked: 'The student-teachers did not understand the intellectual growth pattern of the child, the relationship between learning and motivation, techniques of individual and group counselling and the importance of teacher-parent relationship'.

Analysis of examination papers from a number of centres revealed that only memorisation of text content was required. Moreover, the type of questions set in the papers did not test all the objectives laid down. Activities which were not considered important from the examination point of view were not carried out, thus adversely affecting the training.

Interviews with student teachers and trained teachers showed that no student teachers had studied a single book by Muslim thinkers other than that which appeared in their textbooks. Field trips were usually discouraged. Teachers were generally unaware of the reports of National Curriculum Committees.

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[3] The categories of certification for teachers before entry into the teaching profession are as follows:

PTC (Primary Teaching Certificate)
JV (Junior Vernacular)
CT (Certificate of Teaching)
OT (Oriental Teaching)
B Ed (Bachelor of Education)
M Ed (Master of Education)
and PhD

Thus this short, incomplete training is all that is given to the 16/17-year-olds just coming out of high schools. This brief exposure to instructional technology, this inadequate and incomplete training, underscores the need for supplementing it through regularly repeated refresher courses when the teachers have come across practical difficulties in the field. Hence while preservice training is an absolute necessity, it needs reinforcement through in-service training at regular intervals.

Allama Iqbal Open University

Pre-service training is also being imparted by Allama Iqbal Open University This training is mainly through correspondence. Its PTC Programme, based on 36 units of self-learning packages, offers a complete PTC course for those who somehow entered the profession without any professional qualifications. As well as correspondence lessons, there are Radio Programmes and guidance by part-time tutors and get-togethers in Study Centres.

Part II of the programme comprises one week's practical workshop training in lesson planning, preparation of audio-visual aids, setting of question papers, observation of lessons, and is supported by demonstration lessons. Besides the workshop, a three weeks practice teaching session is arranged, usually in a school other than that in which the teacher is working.

The pre-service and in-service training of untrained teachers has become a very popular programme made necessary by the fairly large number of untrained teachers in the schools. In the absence of regular training programmes these correspondence course could be good substitutes.

Field-Based Teacher Training Programme

The Field-Based Teacher Training Programme (FBTTP), instituted in Northern Areas of Pakistan, is an innovative programme for the untrained teachers of that area. Initiated by the Agha Khan Central Board of Education, it is now co-sponsored by the Government Department of Education. Started in 1984 in and around Gilgit, the programme aims at establishing a system of inschool teacher training based on the PTC syllabus. The central feature of the programme is that instead of dislocating the teachers and having to make alternative arrangements for their classes, the training is imparted by their own headmasters, trained for the purpose as Master Trainers. This brings the instruction to the very place of duty of the teachers and thus the trainees can put the concepts being learned into immediate real-life practice.

Apart from on-the-job training, a very important and innovative feature of the programme is the provision of teaching manuals for all school subjects of the PTC course. This one year's training, provided in the teachers' own schools, guided and supervised by their own headmasters, culminates in the regular PTC examination.

An evaluation study conducted by the National Institute of Psychology in Pakistan concluded that the FBTTP teachers planned and structured their lessons better, made more effective use of the blackboard, knew the art of

asking questions, and were able to maintain students' interest by providing proper stimulus and a variety of organised classroom activities. They proved to be better teachers of Urdu and Mathematics. Their attitude towards teaching was also more positive.

In-service training

The inadequacies of pre-service teacher training programmes and the presence of a substantial work force with no training makes in-service training even more important. It is selfevident that changes in the content and even more so in the methods of teaching-learning can be effected only if a large number of existing teachers, especially in the primary school sector, are adequately prepared through a systematic process of retraining.

In-service education aims at promoting the continuous professional growth of the teachers after they have joined the profession. The need for further study is directly related to the ability of a teacher to perform teaching tasks in a variety of educational settings.The more the nature of their role changes, the more frequently the teacher must receive in-service education. Experienced teachers may need such training to improve their professional knowledge, skills, and attitudes in order that they can educate children more effectively. In Pakistan various agencies are engaged in providing facilities for in-service teacher education.

Education Extension Centres

The Education Extension Centres (EEC) working under the direct control of Provincial Education Departments, arrange in-service training programmes either on their own premises or at regional centres, established for the purpose. Short term courses of two to four weeks' duration are held throughout the year depending upon resource availability. The aim is to develop the competency of working teachers in teaching methods and techniques as well as improving their mastery of content. The topics covered in the courses also include lesson planning and presentation, the use of textbooks, class and home assignments evaluation, guidance, discipline, co-curricular activities, etc.

There are six Education Extension Centres in Pakistan and seven Pre-Service, In-service Training Centres. The policy requires that training be imparted to all teachers within a cycle of five years but a glance at the output of these centres reveals that this is not being achieved. Four Extension Centres, for which statistics are available, imparted training to 4074, 2745, 2435 teachers during 1985 to 1988 which amounts to 770 teachers per centre per year. Computed on the basis of this average and assuming that Pre-Service and In-Service Training Centres are also training as many teachers as the Extension Centres, the output in five years will be 770 x 13 x 5 = 50,050 while the actual number of primary school teachers is, according to the Central Bureau of Education, 186,260. This means that the existing institutions can cater to only 27 per cent of the total. Hence the necessity of supplementing these facilities (Farooq, 1988).

As discussed above, Education Extension Centres have limited capacity and resources to provide in-service training for all the teachers. Moreover, administrative failures, such as the repeated nomination of the same persons

for the courses to the neglect of those who have not benefitted, further curtail this number.The limited capacity of these centres is mostly because of inadequate budgetary provision, e.g. while Rs 3,010,000 was sanctioned for EEC, Lahore, in 1986-87, this sum was reduced to Rs 2,417,000 in 1987-88. This makes the enlargement of their scope a difficult matter. Hence, other avenues have to be explored.

Primary and Non-Formal Wing (Ministry of Education)

Training programmes being arranged by the Primary and Non-Formal Wing (PNE) of the Ministry of Education are intended specifically for primary teachers: a description follows:

Based on Learning Modules, devised for various subject areas, this three-tier scheme included:

(a) Master Trainers;
(b) Supervisors; and
(c) School teachers.

Master Trainers are trained to extend this facility to supervisors. The training of supervisors is organised by provincial Implementation Units in collaboration with the PNE Wing. The supervisors are supposed to arrange training courses for the teachers working in the project areas.

Primary Education Project (Ministry of Education)

The component of Learning Co-ordinators was included in the Primary Education Project of the Ministry of Education with a view to strengthening supervision and ensuring the continuous updating of teachers' knowledge. The Learning Co-ordinators, 466 of whom were appointed in the Experimental Project, provided academic guidance to the teachers, having been entrusted the supervision of only six to nineteen schools. The Headmasters of the Learning Co-ordinators took a great load off the Education Centres for they really facilitated in-service training, bringing it to the very door steps of the teachers.

Provincial Education Departments

The success of this innovative in-service training programme prompted the Provincial Education Department to introduce Learning Co-ordinators in their supervisory hierarchy. Punjab appointed 1957 and NWFP 398 Learning Co-ordinators other than those working in Primary Education Project 1 and 2, but sometimes improper implementation defeated the spirit of the scheme for neither in the Punjab nor in the NWFP were the new appointees given any training. In the Punjab it was seen simply as a promotion plan. Similarly in NWFP most of the Learning Co-ordinators did not know what their specific duties were and how their assignments differed from that of the ASDOs. Being ignorant of the task assigned to them and having been given no training they were unable to provide any professional guidance to the teachers. Thus this revolutionary step in the in-service training programme will fail to achieve anything substantial.

Resource Centres, 200 of which were established in the Punjab, functioned as in-service training units and practically demonstrated decentralisation of in-service training. Education Extension Centre, Lahore,

under another programme, sponsored by UNICEF, set up 116 Teacher Resources Centres and these have virtually taken over the task of organising refresher courses for primary teachers. In fact all the courses meant for primary teachers are organised in these centres.

Inspired by Nepal's idea of on-the-spot teacher training Curriculum Research and Development Centre (CRDC), Lahore, has introduced it on an experimental basis in ten schools. The experts at the Centre deliver model lessons and provide guidance to the primary schools right inside their institutions. Thus the training facility has been brought to the very door steps of the teachers.

Other organisations

In addition to Education Extension Centres, smaller organisations, like the Agha Khan Central Education Board, also conducted short term Refresher Training Courses (RTC) of two weeks' duration.They provide an annual facility (during the summer vacation) for intensive training in classroom instruction to about 250 trained (PTC) and untrained teachers.

Some other organisations are also involved in teacher training. The training imparted by certain organisations, for example Boards of Intermediate and Secondary Education, sometimes includes training courses on the setting of question papers: such training should be given to all teachers as testing is an integral part of teaching. Inter Board Committee of Chairmen, a co-ordinating Agency for the Boards, also organises such workshops.

Textbook Boards and Curriculum Research and Divisional Centres arrange training programmes for prospective authors or for teachers when revised courses are introduced. But in most of these programmes the primary teachers' participation is minimal.

Distance education

Teacher training courses are also organised through distance education. The Allama Iqbal Open University (AIOU) has launched the Primary Teacher Orientation Course (PTOC), which is especially popular among untrained primary school teachers. It enrols a large number of in-service teachers in each semester. The courses comprise textual lessons, media-based lessons, guidance through part time tuition, and compulsory practice teaching. The course curriculum, for these courses, is generally modelled on the conventional pre-service programmes.

Conclusions

Project Basic Research in Developing Education Systems

The most extensive and recent study on teachers' certification in Pakistan has been done by Project Basic Research in Developing Education Systems (BRIDGES). The basic aim of the project was to come up with the policy options for the development of Primary Education in Pakistan.

Project BRIDGES is a joint venture of the Academy of Educational Planning and Management, Ministry of Education, Pakistan and Harvard Institute of International Development, and is funded by USAID.

Under this project a national random sample survey was conducted, through which 11,000 students of Class 4 and 5 were given achievement tests, and about 1000 teachers of Class 4 and 5 were interviewed, covering 500 schools in all the provinces of Pakistan.

Over 100 interviews were carried out with federal and provincial education officials to explore issues of concern to the government and to inquire about the implementation of several innovations, such as mosque schools, teaching kits, and Learning Co-ordinators.

Intensive observation of 265 lessons in 32 schools helped to determine which teaching practices were being used by more and less effective teachers.

Several dozen other schools were observed to learn about teaching styles, the benefits and limitations of mosque schools, and the validity of the sample survey.

The author of the study, Professor Warwick concluded his report as follows:

> Certification programmes yield such meagre results because of the poor quality of the education they offer. Unmotivated faculty and students; inactive principals; a curriculum divorced from the day-to-day realities of teaching; heavy reliance on lecturing, dictation, and rote memorisation; cheating on examinations; and a lack of supervision or even much concern about what happens in the colleges all undercut the ability of certification programmes to turn out well-prepared and dynamic teachers. Certification becomes a tiresome ritual to be endured rather than a formative professional experience that shapes teaching behaviour.

Professor Warwick suggests that Pakistan has three options for dealing with teacher certification programmes. The first would be to leave them as they are; the second would be to improve the quality of teacher training by following, for example, the model of the Field Based Teacher Development Programme in reducing abstract theory and emphasising practical and direct experience in schools; the third would be to close down all certification programmes and instead increase the years of formal schooling. I do not think that the closure of the institutes is an acceptable solution: I do agree however that teacher education must be reorganised to make it more meaningful and effective.

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